



VOLUME 06 | ISSUE 01 | AUG 2013

# SENTIENCE

We make you news.

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KARAVAN '13  
26-27 OCTOBER

**I came, I saw,  
I Karavaan-ed.**

Sahana Srivathsa 

To all the newcomers at IISER, as well as those oblivious veterans who were too caught up in their research to pay attention earlier, Karavaan is the official annual cultural fest of IISER Pune. It encompasses a variety of music, dance, art, photography, drama, quiz and literary events, while simultaneously serving as a platform for hosting professional performances.

In an attempt to reduce much of the frantic, last-minute panic that envelops the various events at Karavaan, the former organising committee deemed it wise to initiate the planning as early as the previous semester to ensure that no one would face the problem of lazy summer idleness and boredom. This resulted in everyone's inboxes being flooded with polls, requests, invitations and orders related to Karavaan, over the past few months.

The organising committee is in full swing with all preparations underway and no leeway in meeting any of the crucial deadlines.

The organisers are determined to create a splash in Pune and Mumbai, and ensure that no one forgets the name Karavaan anytime soon. This year, wacky and innovative events like 'Nerdy Nite' and 'DJ Wars' have been introduced in addition to the already popular events like 'Pro-Nite' and 'Band Wars'.

The K-Team absorbed practically every suggestion thrown at them which has resulted in many completely original activities. A flash mob for publicity, a workshop on something fun, a night of short-films, and much much more lies in wait!

The Karavaan fever is infectious. You are bound to catch it if you haven't already, so shed your inhibitions and lose yourself in the enthusiasm and madness that is Karavaan.

The following is the schedule for various club meetings :

Monday - Literary & Photography Club  
Tuesday - Art Club  
Wednesday - Music club  
Thursday - Dance & Drama Club  
Friday - Quiz club

To find more details about the clubs and the various K'13 events, visit the Karavaan website : [www.karavaan.org](http://www.karavaan.org) or write to us on [karavaan@students.iiserpune.ac.in](mailto:karavaan@students.iiserpune.ac.in)

For any further clarifications you may contact the students coordinators: Chaitanya Apte, Shruti Paranjape and Sujay Mate or the faculty coordinator: Dr. Suhita Nadkarni. And why not also follow us on Facebook and Twitter to get fun updates and posts, while you are at it!

## Of Neurons, Nuclei and Necrosis

Sadhana Panzade

The three-day Bio-lecture series, held from 29<sup>th</sup> to 31<sup>st</sup> July, was an initiative by the Bio faculty to familiarise students with the research currently being undertaken in their labs. It proved particularly helpful for the new batches of Int. PhD and PhD students admitted this fall. Divya Rao, who attended the series of talks, shared her experience with Sentience:

As new Int. PhD students, attending the Bio-lecture series was an enthralling experience. Lost as we were before this, it gave us a perfect start, introduced us to the diverse faculty, their areas of their interest, and the quality of research we expect ourselves to get involved in. The interactive discussions, presentations and talks approached topics from various perspectives. They were impressive and touched upon the fundamentals, while updating us with insights about

cutting-edge research. The poster presentations, made by various lab members, were altogether a great learning experience that let us know about the work that interested us in more detail. We also got ourselves acquainted with the work we were ignorant about until now. More than giving us a clearer picture, motivating us to think and indulging us, we were left with the feeling that we are amongst the right people to guide us, we are in the right place to do Science.

In the following week, the Society for Autonomous Neurodynamics (SAND) 2013 Conference took place at IISER Pune from August 5<sup>th</sup> to 7<sup>th</sup>. SAND is a multidisciplinary meeting where scientists explore the dynamics of networks and the relation of neurodynamics to neurological conditions and autonomous activity.

The first meeting of SAND was held

at the University of Toronto in 2004 followed by annual meetings at world famous universities across the globe. Autonomous Neurodynamics is an initiative to study interactive systems that can change their activity in response to the environment as well as those that are independent of it. Presentations were held at IISER where researchers focused on the theoretical underpinnings and implications of autonomous dynamics in terms of neural activity, cognition, social systems and general network dynamics. SAND meetings aim at encompassing a broad array of approaches from Mathematics, Physics, Philosophy, Psychology and theoretical neurosciences. SAND 2013 not only gave IISER students the opportunity to interact and learn about the research happening across several countries but also proved to be a great academic experience for neuroscience enthusiasts.

## Mathematics (Women)

Prof. Jaya N N Iyer

The Symposium "Indian Women and Mathematics (IWM 2013) was organized at IISER Pune, India from 26<sup>th</sup> to 28<sup>th</sup> July 2013. It was a follow-up of IWM 2012 held at the Institute of Mathematical Sciences, Chennai, India from 8<sup>th</sup> to 10<sup>th</sup> January 2012. It was the first meeting to be organized in India to facilitate the interaction between women mathematicians with an active research programme, college teachers from around the country and graduate and undergraduate students. The goal was to attract more women into Mathematics and the lectures were kept at a very accessible level. The response was encouraging, and the National Board of Higher Mathematics, India, offered to support this venture. It prompted the organizers, Prof. Vyjayanthi Chari (University of California, USA) and Prof. Jaya NN Iyer (IMSc, Chennai) to apply for funding to continue the activities in a more systematic way.

It resulted in the second Symposium Indian Women and Mathematics 2013

at IISER Pune, India. The symposium was attended by about 100 female college and university teachers, in addition to young women at various stages in academics. The focus of this meeting was to introduce new Mathematics and also enable the participants to showcase their knowledge. It was facilitated by having two mini-courses on Mathematical Biology and Non-Commutative Algebras. Both are largely unexplored areas in Mathematics. The plenary talks focused on different aspects of Mathematics like the study of groups via Analysis and Geometry, Enumeration problems, Nonlinear analysis and other areas.

The young researchers delivered talks which were received well with enthusiasm and attention. The poster presentations were also well received. The participants and invited specialists had ample time and opportunity to have informal discussions. The Mathematics department and the director of IISER Pune, also gave their whole-hearted support and helped to host the event. The cultur-

al activities included a music concert by renowned vocalists and instrumentalists in Indian Carnatic music and a short movie was also presented.

Next came a feedback session where the participants raised concerns about giving exposure and bringing teachers to the forefront to help them improve their knowledge base and skills in Mathematics. It will help improve education at the undergraduate level in the country, especially in colleges and universities in smaller towns. To this effect, a Women's Teachers Training programme has been planned at Mumbai University, Mumbai, from 23<sup>th</sup> to 28<sup>th</sup> December 2013. We hope to have two more meetings in 2014. The Symposium concluded with a vote of thanks by the Conveners, Profs. Rama Mishra (IISER Pune) and Shantha Bhushan (FLAME Institute, Pune).

This article, previously published in PanAsian IWM 2013 and has been published with the consent of the author.

## S O Gradeful!

Shruti Paranjape

It has been a long-standing complaint in IISER that students do not have a say in policy-making and that our views are neglected. Well, no more! Here's an example of just the opposite. All the students of IISER have been vehemently expressing their views regarding the grading system at IISER (also reported in the November 2012 issue of Sentiencence) for a while now. In addition, the 2011 batch worked up the nerve to send an email to the director regarding the same in January last semester.

Since the rules for giving an O grade weren't formulated very well, many a time, no O grades were awarded in some courses. Also, since professors had to defend the O grades they awarded, there was an underlying suspicion amongst the students that some were too lazy to award O grades. This led to non-uniformity across the various courses.

Another issue was that the A grade corresponded to 9 points, unlike in other institutes where it corresponded to 10. This made our CGPAs much lower than their actual value, making competition with other institutes harder. Many scholarships and institutions for higher studies had CGPA cut-offs based on the standard grading system. Criteria like these would have been met

by most of our students, had we had the normal grading system. Some also had an issue with the disproportionately large jump from B to C as compared to A to B which made one's CGPA take a nose dive!

However, IISER's student community not only identified the problem, they also discussed its solutions. The 2011 batch, in particular, put forward the following suggestions in their email. The first suggestion was that they change all A grades to 10 points and remove the O grade entirely. Another suggestion was that the O grade be kept, but that the O and A grades carry equal weightage. The final suggestion put forth was that intermediate grades be introduced. This would ensure that the drop from one grade to another became more gradual.

It was to our greatest pleasure that the Institute heeded our request, discussed and deliberated this matter in the senate meetings and came through with a decision. It was a moment of great happiness and relief. We sincerely thank them for changing the A grade to 10 points, while keeping the O grade intact. It has restored our faith in the institute regarding listening to its students problems. In return, to show our appreciation we're going to make IISER proud. Just you wait!

## Academic Buzz

Siddhartha Das

1. 5-Day Hands-on Workshop on Molecular Biotechnology and Bioinformatics

Duration : 2<sup>nd</sup>-6<sup>th</sup> Sep 2013

Venue: Pune, Maharashtra, India

URL: <http://www.icsccb.org/workshops/>

2. 101<sup>st</sup> Indian Science Congress

Dates: 3<sup>rd</sup>-7<sup>th</sup> Feb 2014

Venue: University of Jammu, Jammu

URL: [http://www.sciencecongress.nic.in/html/science\\_congress\\_events.php](http://www.sciencecongress.nic.in/html/science_congress_events.php)

3. Workshop for Statistics in Biomedics

Date: 28<sup>th</sup> Sept, 2013

Deadline: Abstract/Problem Submission - 30<sup>th</sup> July, 2013

Registration - 30<sup>th</sup> Aug 2013

URL: <http://www.crcindia.com/CommonCMS/AllEvents.aspx?ID=20>

4. Gravitational Wave Physics and Astronomy Workshop (GWPAW)

Venue: IUCAA Pune, India

Dates: 17<sup>th</sup> - 20<sup>th</sup> Dec 2013

URL: <http://www.iucaa.ernet.in/~gwpaw/GWPAW-programme.html>

Pre-registration is now open.

5. PostDoc position in Condensed Matter Theory, Nottingham

URL: <http://nottingham.ac.uk/Physics/>

Application deadline: 28<sup>th</sup> Sept 2013

6. Ph.D Position in Theoretical Quantum Optics at Niels Bohr Institute, Copenhagen

URL: <http://www.nbi.ku.dk/forskningssgrupper/Kvanteoptik/english/qoptics-theory/>

Application deadline: 25<sup>th</sup> Aug 2013

7. Phd position in Institute for Quantum Optics and Quantum Information, Austrian Academy of Sciences

URL: <http://iqoqi.at/en/>

Application deadline: 15<sup>th</sup> Sep 2013

8. Advanced school and discussion meeting on Knot Theory and its application.

Duration : 10<sup>th</sup> - 20<sup>th</sup> Dec 2013

Venue : IISER Mohali & IIT Ropar

Deadline : 30<sup>th</sup> Oct 2013

URL : <http://www.icts.res.in/program/KTH2013>

the Lecture Hall Complex



Photo : Sharvaree V

## New Directions

One of the first things that the new team initiated was the start of a new centre at Pashan, exclusively for the kids who work in shops in and around the Pashan market. These kids are very smart, but are unfortunately unable to attend regular school. Disha has taken initiative in helping these kids and requests support from all those interested.

The details and the timings of this centre shall soon be conveyed to everyone.

Meanwhile, the construction site Abhyasika has been handed over to the Door Step School (DSS), a Pune based NGO that teaches children in construction sites. The DSS organises classes for

these children daily, except on Sundays, from 9.30 AM to 5.00 PM, near the Mendeleev block. Disha invites volunteers to come and assist in teaching the kids and is also grateful to the faculty of IISER Pune for their generous support, both morally and financially, in bringing this initiative to life.

In addition, the center at Lamanvasti will soon be reopened in collaboration with the local municipal school where the classes will be held for the Abhyasika.

'Talk for Twenty' is Disha's latest venture which provides a platform for the students in IISER and outside to discuss

and analyse social issues around the globe. Every month be it an IISERite or a non-IISERite, of any age or profession can come and take the stage to talk about any social issue for 20 minutes. Disha hopes that 'Talk for Twenty', will inspire people to do their bit for society.

Disha has also released the very first issue of its newsletter, "Pahal" on Independence day. Pahal aims to cover all that's happening in Disha. The e-copy has been made available to everyone to keep them updated of the events going on at Disha.

Harini Suri



## The International Convention

Papia Bera



Photo : V R Shree Sruti

This summer, 1700 people flocked to the very first SPIC MACAY International Convention held at IIM-Kolkata, hosted by the SPIC MACAY Kolkata chapter. A typical day at the convention involved waking up at the ghastly, yet somehow beautiful, hour of 3.45 AM. The unearthly wake-up calls had everybody groggily stumbling to the morning yoga sessions where experts from all over India taught the art of Naad Yoga and Hatha Yoga. After the long yoga sessions and a healthy breakfast, the participants hurried to their re-

spective intensives.

The intensives ranged from popular dance forms, like Kathak and Bharatanatyam, to folk painting techniques, like Patua and Phad. Some of the celebrated artistes who were part of the program were Pt. Birju Maharaj & Su. Saswati Sen for Kathak, Ustad Abdul Rashid Khan for Hindustani Vocal and Smt. Ambika Devi for Mithila folk painting.

The afternoon programs included Baul (Bengali folk singing) by Smt. Parvati Baul, Koodiyattam by Smt. Kapila Venu, Pandwani by Smt. Teejan Bai and also

talks on painting and screening of classic cinema programmes. This was immediately followed by an early dinner.

After dinner, we were treated to a series of concerts that began at 6.00 PM. These were mostly vocal concerts by maestros such as Ustad Abdul Rashid Khan, who, at the age of 105, performed with such passion and strength in his voice that the audience was overwhelmed. Other notable performances included Kathakaliby Guru Kalamandalam Gopi and a violin recital by world renowned Prof. T N Krishnan.

On the last day of the convention, all participants were given a chance to display what they had learnt in their intensives and perform on the same stage as their idols. These performances were presented by groups ranging from large groups of Kathak dancers to children performing Pandwani. That same night, many were introduced to the uplifting concept of an overnight concert. This started at 8.00 PM with Pt. Shivkumar Sharma on the Santoor, followed by Ustad Baha'uddin Dagar on the Rudra Veena. It ended with Pt. Ajoy Chakroborty's Hindustani vocal performance early next morning.

As a final goodbye, SPIC MACAY arranged for a cruise on the Hooghly River for all the participants, with a scrumptious feast of Bengali food and an amazing view of the city.

## Creating Order from Chaos

The Sentience team recently caught up with Prof. G Ambika for a brief chat about her research, the work and responsibilities of her office, her hobbies etc. Here are a few excerpts from the interview



ST: Could you please tell us a little about your field of research?

GA: I work primarily with complex systems which are systems in nature that have any subunits whose dynamics are mostly non-linear. Of late, I have been focussing on complex networks where a large number of connected systems have coordinated activity, such as neuronal networks. I am trying to look at the effects of environmental perturbations on the dynamics of these systems.

This is a very broad question and we have worked out a general theory that addresses these issues.

ST: What criteria do you look for when you recruit project students?

GA: I am a theorist. Hence most of the work I do is computational. When a student wants to work with me, the most important aspects I look for are enthusiasm, aptitude and passion for research.

The field I work in is mostly dominated by numerical analysis and computer simulations. So basic knowledge of algorithms and programming is desirable though not compulsory.

ST: As the dean of graduate studies, what are the duties of your office?

GA: I mostly handle the BS-MS programme along with coursework-related matters of the Int. PhD and PhD programmes. The announcement of grades, registration for courses, matters regarding attendance for courses, examinations, recommendation of degrees for eligible candidates and organisation of the annual convocation fall under the purview of my office.

ST: In terms of administrative ability, do you think there are particular areas that need improvement?

GA: Initially we started with little administrative support. A system had to be established to handle issues such as structuring the curriculum and coursework. That required a lot of involvement on my part and other faculty members' as well. But now we have a better equipped admin department and in course of time they will be able to handle most of these issues.

ST: Could you please share with us your views on different student activities such as Kalpa, Karavaan etc.?

GA: I was one of the people who initiated such activities in the formative years of IISER. I have been involved with Kalpa for its first seven issues. I am always for them, be it Kalpa, Karavaan or any other activity. All these activities, not academics alone, are required to help students develop a multi-faceted personality. These forums give the campus a good ambience for the overall development of the institute.

ST: One of the things that a lot of students, especially BS-MS students want is a student council that has representatives from each batch so that they can communicate better with the administration. Your comments.

GA: I don't see how such a committee can better the system presently in place. We have created an atmosphere here where all student interests and issues are addressed. We have a large number of clubs here - science club, art club, drama club, music club, and so many others. These are all actually forums where students come together, work together

and have group activities. Other than for the sake of having a student council alone, I don't see how it can help.

ST: One good thing that we think the other IISERs like IISER-M are following is to have a few senior students on the senate so that they can put forth student issues directly to the senate. That has not happened as of yet at IISER Pune.

GA: In the present constitution of our senate, there is no provision for that. If this gets revised, we will think about it. But so far the structure given to us does not include students in it.

ST: What are your hobbies?

GA: I paint - oil on canvas. I've been interested in that from the very beginning. Recently because of my work and my other duties here, I find little time for that. Given any free time, I would like to go back to that. I have done only a few canvases so far - around 40.

ST: You are a very well-established professor. At any point of time, did you think that you wanted to pursue an alternate kind of career or have thoughts about not entering the academic field?

GA: Such a thought hasn't come to me because right from my school days I was interested in pursuing science. I have never thought, this is not a fitting career for me. I should have another one. I have always been happy with whatever I am doing. Teaching has always been my passion and so I am fully satisfied with my career.

But if I ever think of another career option, it will be as a free-lancer, an artist since I have always been interested in painting. I never had professional training in painting. I just started doing it on my own. So I would like to develop in those areas and do some free-lancing as a painter.

*We hope this gave you new insights into the life of this old member of the IISER family.*

## Light in Science Show!

Nilima Walunjkar

“ The bright lights fade and the dim lights intensify bringing the night sky alive

No, *aurora borealis* is not a spell from Harry Potter. Neither is *aurora australis*. It's what Muggles call the Northern Lights and the Southern Lights respectively. The phenomenon was rechristened as Polar aurorae to avoid confusion. It has been observed on other planets such as Saturn and Jupiter too.

The Polar aurorae, which are green, red and yellow lights seen in the sky, have puzzled humans for centuries. Their shapes have been described as resembling ribbons, waves and curtains. As the night progresses, the bright lights fade and the dim lights intensify bringing the night sky alive. As with all inexplicable things, several myths have developed around the aurorae. In medieval times, the Europeans considered them to be a sign from God. The Native Americans called them the Dance of the Spirits. Their mystical associations are probably why they were named after the Roman Goddess of Dawn, 'Aurora', the Greek name for the north wind 'Boreas' and the Latin word for southern wind, 'Australis'.

The cause for these lights is fascinating. Solar winds consisting of electrons and protons ejected from the atmosphere of the Sun reach the Earth's atmosphere

and get trapped in the Earth's magnetic field. These winds move along the field lines towards the poles where electrons collide with the oxygen and nitrogen atoms present in the Earth's atmosphere.

The oxygen and nitrogen atoms lose electrons and form ions. When these ionized atoms return to the ground state, (by accepting electrons) they emit photons which cause the coloured displays. The colour of the aurorae depends on which atom gets excited and at what altitude. The nitrogen atoms give off blue or red light, while oxygen atoms give a greenish yellow light at low altitudes and red light at higher altitudes.

These red aurorae are comparatively rare and give the impression of a raging inferno in the distance. The mixing of these colours can produce a myriad of additional colours like purple and pink.

There are two types of aurorae - diffuse and discrete. Diffuse aurorae are not visible but their presence determines the extent of the zone in which aurorae can be seen. They contain the discrete aurora within which are the ones that are usually glimpsed. Discrete aurorae are caused due to acceleration of electrons parallel to the field.

They are visible in the night sky as they are not bright enough during the day.

Unfortunately for tropical dwellers like us, the aurorae are confined to the auroral region which extends around the magnetic poles of the Earth, approximately within the Arctic Circle and the Antarctic Circle. The reason for this is that at the poles, the magnetic field lines are almost perpendicular to the surface of the Earth. The particles from the solar wind can enter easily here. Near the equator, the solar wind is perpendicular to the magnetic field and hence aurorae are not seen. However, powerful geomagnetic storms are known to disturb the effect of the magnetic field resulting in aurorae being observed at lower latitudes. So if the odds favour us, we might witness this astounding phenomenon at the cost of our power grids failing, communication systems falling apart, and satellites losing their function. Definitely worth it, don't you think?

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## ACCESS DENIED! Subscribe to View

Sohan Sarangi



Access denied. How often do you get this message when you try to access a journal? Quite often! Consider a scenario where a student from IISER publishes a paper in a journal; funds and resources needed for the research work were provided by the government (tax payers' money) and after the work is published, the government, again, shells out money to get access to the journal to view the same. Is this fair? The general public who pays for it doesn't get access to it. No one says research is free, but why pay twice; first to get it published and then to get access to the publication again? In fact, why pay to get access to research work when the government is already funding it?

The journals are a channel to circulate new findings through the science community and the public in general. In earlier times, it involved a lot of typesetting, printing and mailing across the world which needed money. But with the advent of the internet and digitisation, distribution has become easier and more eco-friendly. In addition, with the concept of online subscription, the costs of publication have gone down exponentially. On the contrary, the cost to subscribe to these journals has skyrocketed beyond imagination in the last few decades which have made these inaccessible to the general public. In the last few decades the inflation rate has been 68% whereas inflation in the subscription of these journals is as high as 250%. Second and third world coun-

tries are finding it difficult to sustain their research infrastructure and some of the best minds are unable to contribute to the fullest.

There are a wide range of journals pertaining to each stream with an average cost of \$1000 per year making it impossible to subscribe to all of them (a journal, *Tetrahedron* costs about \$40,000 a year). In a country as large as India, only a handful of people can get access to journals. The major chunk ends up settling for the resources at hand, leading to the partial acquisition of information from books, unaware of recent discoveries and trends. Sometimes even the abstracts of papers can be misleading. In order to view a single piece of relevant information, one has to buy each of the papers and they come with a no-return policy. If this is done every day then it will burn a big hole in people's pockets.

So what can be done about it? Open Access Journals are the way to go. Open Access means free, immediately available research articles that are online and give you re-use rights. It aims at making research content available for anyone in the world to read, peruse and build upon. The idea is to make research literature more valuable.

The earliest concept of open access journals was proposed by Leo Szilard. He proposed a publisher-pay model, pay to publish. In this model, the author has to pay to get the paper published. Usually the amount is from

the researcher's grant. The average amount per article is \$2000 and after payment many researchers run out of money to fund even their travel. In such a scenario, it is even more difficult for a student to publish good work owing to the high cost of publication. The benefit from this model is mostly for the publishers.

The refunds for unpublished papers are very low. Some journals like PLOS charge high rates when it comes to first world countries and a nominal or no charge at all to third world countries. The concept of the Gold Open Access Journal led to an explosion of low-quality research being published and it collapsed when a paper generated by a computer program was accepted by a journal for publication.

Another much-sought-after alternative which currently exists is the Green Open Access. In this model, the author submits a post-review print to an online repository or an open-access website after it has been accepted for publication. These submissions, again, depend on the researcher and the conditions laid down by the publishing company. One of the most famous repositories for Maths and Physics is arXiv.org. It provides quality work, free for general public access.

Various steps have been taken by countries like the USA to promote the concept of Open Access journals. The United States' Federal Agencies, with more than 100 million dollars in annual R&D expenditure, plan to make their research freely available within one year of publication. More such steps are needed. Communities have come together to celebrate Open Access Week every year to promote and discuss the improvement of open access journals.

We don't have any evidence as to which of the systems is optimal, so we should try and experiment with all sorts of different alternatives till we find the best one. It is clear that Open Access is the future.

For more discussions visit: [www.open-accessweek.org](http://www.open-accessweek.org)

# Bystander Interference in Classrooms

Vishak Sagar



Suppose a student has a doubt; if he is alone, he usually tries to find an answer through various methods like asking the teacher, asking a friend, referring to books or surfing the internet. Everyone has doubts when sitting in a classroom, but very few actually bother to ask for a solution. As an unwritten rule, the majority of the class does not ask questions. It is always the same set of students who ask questions in class. This does not imply that other students do not have doubts, or that the ones who are asking doubts are ignorant or smart. This phenomenon can be understood with reference to 'diffusion of responsibility' among students.

The idea of diffusion of responsibility was created in the process of trying to analyse the murder of Kitty Genovese by psychologists John Darley and Bibb Latan. Moseley, a mentally unstable person, murdered Kitty in a neighbourhood of around forty people. When he attacked her, she screamed, and though people heard her, nobody came to her aid. One person, though, came to the window and asked, 'Who's there, what's going on?' Moseley on hearing this, got scared and went away. When that person went back home, Moseley came back and killed Kitty. No one

thought of calling the police. None of them even stepped out of their houses.

When John Darley and Bibb Latan tried to comprehend this situation, they observed that if there is just a single person available to help, there is a greater likelihood of that person helping, compared to when he or she is in a group.

The idea is that if you are the only one present, it is your responsibility or you feel responsible for anything that happens to a person in distress. If you are in a group, you feel that your responsibility to act has reduced. It's not my problem, it's somebody else's. You assume that there are others who will take action, who will be better equipped to handle it.

This idea can be used to explain the behaviour of students in class. When the teacher teaches a subject and a student has a doubt, he believes that somebody else will also have the same doubt and that it will be clarified eventually. The so-called smart ones in class are expected to take up the responsibility of asking doubts.

A doubt is something that is personal; it is something produced as a result of the individual's thinking. To believe that one's question will be dealt with by somebody else contradicts common sense. But this happens anyway. This is because

of bystander interference. The presence of other students in class makes you less inclined to clarify your own doubts. You would have asked if you were alone, but when in a group, you don't; you want somebody else to ask it for you.

Can something be done?

1) As a student, one should limit oneself to a maximum of two doubts per class, any more can be dealt with outside class if not addressed during the rest of the class by others.

2) The student needs to feel a bit more personal about his questions and be ready to get answers even if he/she has to wait 60 minutes.

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Political fights are absurd, ludicrous, and idiotic. Everybody thinks so, and yet they happen. Two opposing sides yell themselves hoarse at each other, with no party gaining anything but sore throats and distrust for anyone with a different opinion. Nobody ever remembers what the real issue was in the first place, for that is always lost under the great mountain of insults that has risen due to it. We, however, think that such disputes are silly things that happen far away, in the halls of Parliament or some council in a fancy building far from home, with little to no bearing on our lives, unless a bill comes out of all of it. We're beyond such tries, right? Right?

Wrong.

Our own institute has seen a similarly ugly quarrel take place over the past couple of days, with both sides at fault, and with both sides seeming worthy of sympathy. The issue itself, a question of ragging or 'taking intros', has only negative connotations, which is why it is so strange that it arose here at IISER in the first place- an institute full of future scientists, who are supposed to make comparatively rational decisions.

It would be easier to understand why matters blew up the way they did, if what should and what shouldn't have happened are considered. For starters, the concept of holding 'intros', or introduction sessions, is tradition. It typically involves a gang of seniors breaking the ice with all or a group of freshers, asking them to announce their names, hometowns, and hobbies. This is innocent enough. The practice swims into shady waters when the same gang calls up each new student, individually, to their rooms. Questioning done this way is much more intimidating, especially for a kid who has just left home (possibly for the first time), knows practically no one on campus, and is faced with the prospect of being teased (or even threatened) by a group of older people he is supposed to respect.

All of the above is said leaving aside the fact that being summoned to a stranger's room, (usually at night) with no prior notice is annoying, disruptive to any schedules or plans one might have, and unfair (not to mention scary).

It is understandable that senior stu-

dents want to meet the new kids on the block, joke around with them, or even tease them mildly. This is in no way should lead to events that are humiliating, distressing, or uncomfortable for any side. There's a very fine line between banter and abuse, and it's a serious matter when that line is crossed.

As said, new students should behave how they do with everyone else- normally. There is no need to be timid, servile, or scared. There is no need to treat seniors in a professorial manner, or grovel before them. There is also no need to snap at people, abuse anybody, behave rudely or with arrogance, which is unacceptable and disrespectful behaviour where anyone is concerned, not just a senior student.

**Being ragged is not something that should happen and no one should allow it to happen to them.**

Being ragged is not something that should happen, and no one should allow it to happen to them. People owe it to their selves to defend themselves against others who try to take advantage of them. When people are, unfortunately, harassed- it does not, in any capacity, give them the right to indulge their nihilistic philosophies or twisted sense of justice and take out their frustrations on somebody else. Some believe that this need to assert dominance over someone else is an expression of low self-esteem, that by trying to debase somebody else in front of a group, one tries to increase their own value in the eyes of that group. It is hard to disagree.

If the above line of thought finds no takers, we'll have to take a leaf from Dr. Sunil Mukhi's book and throw out a not-so-gentle reminder that some of the batches were compelled to sign a mighty ve-page anti-ragging affidavit, mentioning the legal repercussions of any hazing behaviour seen on campus.

Disturbingly, some people with streaks of sadism embedded in them, enjoy

hazing others just for the joy of it, to show them that they can physically or mentally harass them and get away with it. Worse still, other institutes have been witness to cases of cross-gender ragging that steps firmly into criminal territory as cases of eve-teasing. Students have taken their own lives, some have gone to prison and others have had their morale shattered and their futures destroyed because of teasing that went out of control. Incidents that are reported in the newspapers or on television call a lot of negative, sensational attention to the institute, which exacerbates the problem, as the institute usually attempts to distance itself from the events that occurred. We can optimistically and gratefully note that we face no problem even half as serious as these.

We reiterate that nobody feels any happier after such petty incidents happen, and that nobody takes sunny memories away from sessions of ragging. People readily brush away mild ragging as normal, but they don't realise that any kind of hazing can backfire terribly, and with great ease, because people have different levels of sensitivity. What one person is able to brush off may take someone else days or even weeks to recover from mentally. Hazing gone wrong can upset dozens of people, injure their egos (which is a more serious problem) in the process, and cause the wastage of precious time that is used to wade through the messy consequences, but that could have been used for a variety of other nobler pursuits. The groups that were involved in the verbal scuffle of the past few weeks are both furious and hurt, and understandably so. However, the most important thing for them to do is to reflect on their part in the argument, forget what happened, and move on. Saying this is obviously as easy as finding a faulty bus in Pune, but it does need to be said. It's not often said, but one thing we love about IISER is the cordiality and relative lack of groupism amongst the students. We can only express the hope that unsavoury incidents like what have passed are not repeated, and that things quickly return to normal between the parties involved.

Note : Due to lack of clarity and factual errors previously published in this piece, certain sections have been retracted.

## MUSE

Black Dog

The Sentionce team (after a lot of grovelling, begging and flattery) agreed to let me give their readers a few insights into rock music and some tips on some not-so-well-known bands they might like to follow.

Muse is a British Grammy winning (if you care about such things) alternative rock band.

Their music doesn't fit any conventional rock genre which gives it an attractive mix of styles. You can feel the progressive rock influence in the deep, well thought-out, unconventional, yet simpler riffs, the simplicity and raw power of punk rock ('Starlight', 'Dead Star'), and the jazz influence with prominent bass lines ('Darkshines', where they manage to get a very sax-sounding sound from their guitars). The fact that the band manages to maintain its own sound while wading through different styles, is quite an accomplishment.

From a typical song you can expect a light intro, reminiscent of Led Zeppelin, a couple of gripping heavy

melodic riffs, followed by sing-along choruses. They also like to experiment with effects. They get away with it too, something every rock band since Pink Floyd has tried, and failed hopelessly at.

Listeners of easy light music might like 'Falling Down', 'Unintended', which have the lead singer showing off his vocal range and hitting highs with precision.

If you are a member of the mysterious species that only inhabits IISER Pune and listens exclusively to metal, this isn't metal and I have wasted your time. For the rest of you enlightened souls who have transcended the music-genre-cult culture, give this band a shot. It's different and you might like it. If you are a member of the pop-music-listening community, this column is your ticket out of the land of contemptuous looks every time you open your mouth to talk about music. You'd do well to heed my advice.



## Not Without my Daughter

Snehal Kadam

Once you start reading this book, you simply cannot put it down. This true story is sure to touch your heart in such a way that one feels its presence long after the last few pages have been turned.

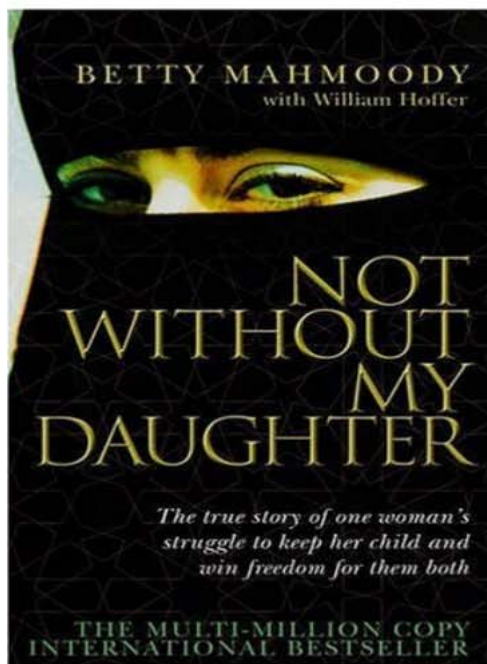
In 1984, Betty, a Michigan divorcee with two sons, married an intellectual, but not a particularly devout Muslim, Dr. Sayyed Mahmoody. Pressured by his family, Dr. Moody talks Betty into a short trip to his native country, Iran. He swears on the Koran, promising they will return in two weeks. Though reluctant, Betty agrees and that one decision changes her life.

Once in Iran, Betty watches the man she loved transform from a progressive, tolerant man into an abusive fanatic. Betty and her beautiful four-year old daughter, Mahtob, become prisoners and are

forced to adopt the customs of Iran. Betty is a woman who never lost hope and stayed strong even on the worst of days. She is not one to inch from the truth whatever the consequences. As Betty takes you through her journey, you realise the power of a mother's love.

Though the book uses really simple English, it reaches out to the reader and its powerful message is easily conveyed. Reading the book, you not only learn about the intricacies of another religion, you also realise how fortunate you are compared to other women.

While reading this book, I was angered by the kind of treatment that was meted out to women. Betty's determination helps her survive the impossible. Her story is truly inspiring.



# pr e s s i o n

## A for Agumbe...

Dincy Mariam



Photo : Dincy Mariam

If a child asks me, A for what?, I will say Agumbe. This will remain my answer for at least a few weeks, or months or maybe longer.

I spent a few weeks of my summer (during the monsoon) at Agumbe Rain-forest Research Station (ARRS) doing an internship on the microhabitats of frogs. I hadn't heard about Agumbe until a friend of mine mentioned it casually one day. Agumbe is a village in the Shimoga district of Karnataka. It is situated at an altitude of about 642 metres from sea level. It is known to be home to the world's longest venomous snake, the King Cobra, which is also the flagship species of ARRS.

The day I reached Agumbe, I got off at the wrong place, Irthahalli, which is about 30 km from Agumbe. After a lot of phone calls to the base camp, I got on to a bus to Agumbe. The path that led to the base was a kilometre or two away from the village and was densely forested on either side. The research station was inside a four-acre arecanut plantation.

There were a few boys playing cricket in the yard in front of the research station. I was greeted by Rambhaya (Ramprasad), who was working on snakes and frogs, and Jiggu (Jignasa Patel), who was a volunteer there. They introduced me to the others at the Station.

Every morning I woke up, to my surprise, at 5:30 AM, to the calls of the whistling thrush, which used to sit on the rooftop and whistle away to glory. When the whistling thrush stopped, it was Chikki and Naala's duty to keep

the music going with their barks, howls and growls. Chikki was the calm and composed one while Naala was the naughty one, even though she was the mother of four puppies. The Research Station was like a mini pet shop with various animals including tadpoles and the Malabar pit viper around. I had the pleasure of seeing these tadpoles at the different stages of their metamorphosis. I also spotted vine snakes and cat snakes during the course of my work.

Agumbe is rich in amphibian diversity. Even though we looked for them, it was their calls that made it easy to find the frogs. *Pseudophilautus amboli*, *Raorchestes luteolus*, *Raorchestes tuberohumerous*, *Ramanella marmorata*, *Rhacophorus malabaricus*, *Hylarana aurantiaca* were a few that I saw. It is known that mouse deer, Sambar deer, leopards, boars, slender lorises (I was only lucky enough to hear them) and giant squirrels are abundant in the interior of the forest though I got to see only a mouse deer. Once, Ram bhayya and I went to a meadow across a stream, in the forest in search of mammals.

The path was blocked by fallen trees because of which our walk was more adventurous. There were only jungle fowls in the meadow. We saw some marks on the trees made by the Sambar deer. My luck with big mammals during field work was quite bad and my record still stands at one with a mouse deer saving my record from zilch.

It rained cats and dogs most of the time and when it did not, it was misty. On

one such day, when rain was the norm, we decided to go swimming. While we stood there admiring the stream, a log came through and Siddharth sir, the director of ARRS, jumped onto it and went down the stream like in action movies, minus all the safety belts. Nagana, the cook at the base, set up a net in the uncultivated paddy field to catch fish for later when the water level would drop. Thanks to the heavy downpour, I never got to eat those fish but that was compensated for by the mouth-watering chicken and pork served at the base. He could make wonders even out of simple vegetarian food.

While getting dreamy about the food and place, I must not forget to mention the leeches, the vampires of the rain-forest. When a group of us went to a waterfall, 1KB, (I am oblivious to the etymology), about 4 km away from the field station, I was made a good meal of by a few leeches. Though I had gotten a few leech bites before, I had never seen 10-15 leeches at the same time on each leg. But 1KB was worth paying that price for. I stood on top of the waterfall stretching both my hands out and taking in the view. I could see the whole of Shimoga from there. We spent some time playing in the water and then returned to the base, tired to the bones. When I run the reels back, I see those wonderful days I spent in Agumbe.

For more details, visit the website: <http://www.agumberainforest.com/>

## Scaling the

Prashali Chauhan

It looked like a  
Standing  
year old  
er-en  
fr

## Foodie Corner

Aditya Katti

Are you a burger fanatic? Have you, lately, been craving for awesome ones? Burger King is the place to be, people! The restaurant caters to both vegetarian and non-vegetarian folk.

The non-vegetarians are particularly spoiled for choice with different types of chicken, fish and beef burgers. The vegetarians also have their fair share of delicacies on the menu, with special offers on milkshake, smoothies and other drinks. Offering a modest price (which is an understatement) for some scrumptious continental cuisine, it is a nice place to go out with friends, family or that special someone! With burgers the size of a small Domino's pizza, this place is guaranteed to fill your stomach. Great taste, large choice and larger burgers.

All said, it is truly the ambience of the restaurant that sets it a class apart.

The restaurant has a vintage touch, both with its lighting and interiors.

The walls are covered with posters of several renowned bands from the 60's and 70's like The Beatles and Pink Floyd, to name a few. So when the music is right, and the food is good, it is a Saturday night well spent!

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