

Program Schedule
Workshop — 12 & 13 Jan 2017
Optomechanics, Orbital Angular Momentum &
Spin-Orbit Interactions of Light

Organized by
Raman Centre for Atomic, Molecular & Optical Sciences (RCAMOS)
 Indian Association for the Cultivation of Science, Kolkata.

12 January 2017

10:00—10:30 Registration

10:30—10:40 Inauguration

| Time | Speaker | Title |
|-------------|---|--|
| 10:40—11:30 | Mishkat Bhattacharya, Rochester Institute of Technology (RIT) | Cavity optomechanics of linearly vibrating systems (Semi-pedagogical) |

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| 11:30—11:45 | TEA BREAK-----TEA BREAK-----TEA BREAK | |
| 11:45—12:35 | Bimalendu Deb, IACS | An introduction to orbital angular momentum of light & its potential applications (Semi-pedagogical) |
| 12:35—13:05 | Sonjoy Majumder, IIT-Kgp | Transfer of orbital angular momentum from light to trapped atoms (technical) |
| 13:05—13:35 | Tarak Nath Dey, IIT Guwahati | Coherent generation, control and manipulation of structured beam in atomic vapor (technical) |
| 13:35—14:30 | LUNCH BREAK-----LUNCH BREAK-----LUNCH BREAK | |
| 14:30—15:00 | Prasanta K. Panigrahi, IISER Kolkata | TBA (technical) |
| 15:00—15:15 | Sriram S., IISER-Kolkata | On the origin of the coherence of sunlight on earth (Student seminar) |
| 15:15 – 15:30 | Rik Chattopadhyay, RCAMOS, IACS | OAM of light at Dirac point in twisted Hollow core Photonic Crystal Fibre (Student Seminar) |
| 15:30—15:45 | TEA BREAK-----TEA BREAK-----TEA BREAK | |
| 15:45—16:45 | Ayan Banerjee, IISER, Kolkata | 'Light-band?!' Trapping and manipulating mesoscopic matter using optical tweezers (Semi-pedagogical) |

13 January 2017

| Time | Speaker | Title |
|---------------|--|---|
| 09:30—10:50 | Subhasish Dutta Gupta, University of Hyderabad | Coherent perfect absorption mediated enhancement in nonlinear and spin optics (Semi-pedagogical) |
| 10:50 – 11:20 | Nirmalya Ghosh, IISER-Kolkata | Weak measurements on spin optical effects (Technical) |
| 11:20—11:30 | TEA BREAK | TEA BREAK |
| 11:30—12:20 | Mishkat Bhattacharya, RIT | Optomechanics based on the exchange of orbital angular momentum between light and matter (Semi-pedagogical) |
| 12:20—12:35 | Sudipta Saha, IISER kolkata | Reflection of waves from spatial Kramers-Kronig optical media (Student Seminar) |
| 12:35 – 12:50 | Somnath Naskar, IACS | Photoassociative cooling and trapping |
| 12:50—14:00 | LUNCH BREAK | LUNCH BREAK |