



# **Astronomy with Adaptive Optics on Moderate-sized Telescopes**

**IUCAA, August 22 – 25, 2011**

## **Programme**



### **Monday August 22, 2011**

0915 - 0930 A. K. Kembhavi Welcome

#### **Session 1 – Adaptive Optics Short Course**

0930 - 1000 A. N. Ramaprakash Motivation for Adaptive Optics in Astronomy  
1000 - 1030 C. Baranec A Brief History of Adaptive Optics (credit F. Rigaut, Gemini Obs)  
1030 - 1100 Tea Break

1100 - 1140 N. Law (Video) A Review of Adaptive Optics Science  
1140 - 1210 S. Tendulkar Wavefront Sensors, Deformable Mirrors, Lasers  
1210 - 1240 S. Prabhudesai Adaptive Optics Reconstruction Methods  
1240 - 1310 R. Dekany Adaptive Optics Systems Engineering  
1310 - 1400 Lunch Break

#### **Session 2 – AO in Astronomy**

1400 - 1445 R. Dekany Palomar and Keck Adaptive Optics Systems  
1445 - 1530 S. K. Saha Aperture Synthesis at optical wavelengths  
1530 - 1600 Tea Break

1600 - 1700 R. Nityananda Imaging science: the journey from seeing to believing  
1700 - 1800 Recitation, Discussion  
1800 - 1840 B. Ellerbroek (Video) Adaptive Optics for the Thirty Metre Telescope(TMT)

### **Tuesday August 23, 2011**

#### **Session 3 – Robo-AO Science, Techniques I**

0900 - 0940 C. Baranec Robo-AO – An Overview  
0940 - 1010 N. Law (Video) Robo-AO Science and the Binary Project  
1010 - 1030 T. Morton (Video) Kepler Follow ups  
1030 - 1100 Tea Break

1100 - 1120 A. N. Ramaprakash Robo-AO upgrade, plans in India  
1120 - 1140 R. Dekany Precision Astrometry & Dark Matter  
1140 - 1200 S. Hildebrandt Tests of Gravity via Astrometry  
1200 - 1220 S. Tendulkar White Dwarfs  
1220 - 1240 J. Bagchi Probing AGNs and mergers at high resolution  
1240 - 1300 C. Baranec Robo-AO Commissioning Results  
1300 - 1400 Lunch Break

#### **Session 4 – Robo-AO Science, Techniques II**

1400 - 1420 M. P. Burse Robo-AO control hardware  
1420 - 1440 G. Dewangan Searching for binary super-massive BHs in AGNs  
1440 - 1520 R. Riddle Robo-AO software, LGS & USSTRATCOM  
1520 - 1540 C. H. Ishwarchandra Search for high redshift radio galaxies  
1540 - 1600 G. Hallinan TBD  
1600 - 1630 Tea Break

1630 - 1730 L. Hillenbrand A Potpourri of Accretion, Outflow and Activity in Young Suns



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### Wednesday August 24, 2011

#### **Session 5 – Robo-AO Future**

0900 - 0930	P. Choi (Video)	The Pomona AO system
0930 - 0950	R. Riddle	Robo-AO network
0950 - 1010	R. Dekany	South Pole Robo-AO (SPRITE) & Arctic Robo-AO
1010 - 1020	Conference Photo	
1020 - 1100	Tea Break	

#### **Session 6 – AO Initiatives in India**

1100 - 1130	A. K. Gupta	Development of Adaptive Optics Imaging System at IRDE
1130 - 1200	A. R. Ganesan	Development and characterization of a closed loop Adaptive Optics System for Wavefront Control
1200 - 1220	A. Omar	AO related work at ARIES Devasthal site
1220 - 1240	R. A. Bayanna	Prototype Adaptive Optics System at Udaipur Solar Observatory
1240 - 1300	P. Parihar	Development of Lunar Scintillometer to record ground layer turbulence profile
1300 - 1400	Lunch Break	

#### **Session 7 – Synergies**

1400 - 1430	V. Bhalerao	NuSTAR: Unveiling the Hard X-ray Universe
1430 - 1500	S. N. Tandon	Introduction to ASTROSAT
1500 - 1530	D. Bhattacharya	Science with ASTROSAT & synergies with NuSTAR
1530 - 1630	Tea Break	
1630 - 1700	R. Smith	Palomar Transient Factory-2 Instrument and Detector
1700 - 1730	G. Helou	Palomar Transient Factory-2 Data and Pipeline
1730 - 1800	S. R. Kulkarni	Shock & Awe: No Transient Left Behind

### Thursday August 25, 2011

0700 - 1400 Visit to IUCAA Girawali Observatory (Limited seats)