



INTER-UNIVERSITY CENTRE FOR ASTRONOMY AND ASTROPHYSICS

(An Autonomous Institution of the University Grants Commission)

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## **Post-Doctoral Fellowship - Resolving the impact of AGN feedback on gas and star formation through simulations and observations at IUCAA, Pune**

### **Brief description of the project:**

Applications are invited for a 3-year postdoctoral fellowship position at the Inter-University Centre for Astronomy and Astrophysics (IUCAA). The position is funded by the CEFIPRA Indo-French Centre for the Promotion of Advanced Research project "Resolving the impact of AGN feedback on gas and star formation through simulations and observations". The successful candidate will work in close collaboration with Prof. Dipanjan Mukherjee at IUCAA, India and Dr. Nicole Nesvadba at the C te d'Azur Observatory, Nice, France. The work will involve designing and performing state of the art magnetohydrodynamic simulations of AGN jets interacting with their host galaxy and predicting observable signatures which can be compared with observed data. The candidate can also take an active role in analysing existing observational results as a part of the collaboration.

For queries regarding the position email at: Prof. Dipanjan Mukherjee ([dipanjan@iucaa.in](mailto:dipanjan@iucaa.in)) or Dr. Nicole Nesvadba ([nicole.nesvadba@oca.eu](mailto:nicole.nesvadba@oca.eu)).

### **Qualification & Experience:**

The candidate must have a Ph.D. degree in astronomy, astrophysics or a related discipline. Experience in numerical simulations will be advantageous. However we encourage applications from all candidates with a background in AGN feedback and/or extragalactic astrophysics, including qualified observers who wish to focus on a simulation project. Applications by women and members of underrepresented groups are particularly encouraged.

### **The Offer:**

The net salary is 47,000 INR (with additional housing rent allowance), which may increment to 49,000 INR and 54,000 INR in the second and third year. Funding to allow travel to France to collaborate with Dr. Nesvadba will be available.

### **Application process:**

Interested candidates are requested to send a curriculum vitae, summary of research (max 4 pages) and publication record combined in a single pdf to [application@iucaa.in](mailto:application@iucaa.in) by **April 06, 2022**. The subject line of the email should mention "CEFIPRA AGN feedback PDF application". Additionally, please also arrange recommendation letters from 3 or more referees to [application@iucaa.in](mailto:application@iucaa.in) by **April 06, 2022**. Please mention the names and email addresses of the referees in your application.

Please mention in the subject line 'CEFIPRA AGN feedback PDF application' and send the PDF file to [application@iucaa.in](mailto:application@iucaa.in). Incomplete applications will be rejected.