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Universität Hamburg
DER FORSCHUNG | DER LEHRE | DER BILDUNG

*The Hamburg Observatory (University of Hamburg)
invites applications for*

1 Ph.D. Position

in the research field of “**Numerical modelling of high-energy emission from galaxy clusters**”.

This research project will tackle the open issue of the cosmic ray particle content in large-scale structures, with a particular focus on the numerical modelling of galaxy cluster mergers and the use of radio and gamma-ray data to constrain the most uncertain parameters of shock acceleration in the intra-cluster medium. The research will be coordinated by Dr. Franco Vazza and Prof. Marcus Brüggen (Hamburg Observatory).

The Ph.D. position is available for 3 years, the salary is based on the German federal public service scale (E13 TV-L). Employment is in accordance with the regulations for Ph.D. students at the University of Hamburg.

Applicants should hold the equivalent of a MSc or Diploma degree in physics or astronomy and ideally should have gained first experience with astronomical research, particularly in the field of numerical simulations. Women are especially encouraged to apply, according to the equal opportunity policy of the University of Hamburg. Handicapped people will be preferentially considered in case of equivalent qualifications.

Interested students are invited to send their application, including their curriculum vitae as well as one reference letter (as a separated email from the applicant's reference person) before March 31st 2014 to

franco.vazza@hs.uni-hamburg.de

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21029 Hamburg

For further information on the activity of the Extragalactic Group of the Hamburg Observatory:
<http://www.hs.uni-hamburg.de/DE/Ins/Per/Brueggen/index.html?lang=en>