In the frame of the PRISMA excellence cluster, the University of Mainz is seeking to strengthen its efforts in experimental astroparticle physics. Starting immediately, we offer

1 PostDoc position

to work on IceCube-Gen2, the next generation upgrade of the IceCube neutrino telescope.

In neutrino telescopes, Cherenkov light emitted by charged particles from a neutrino interaction is detected in a transparent medium. Using a volume of $1km^3$ of glacial ice, the IceCube detector at the geographic South Pole has recently a flux of discovered high energy extra-terrestrial neutrinos. Following this success, upgrades are planned for the IceCube detector to extend its physics potential both at the highest energy where neutrinos can help establishing the sources of cosmic rays as well as at lower energies, where the high statistics of atmospheric neutrinos allows precision measurements of the neutrino oscillation parameters.

In both cases, the science potential is significantly driven by the number of photons that can be detected form the interaction. In this context, a new sensor type based on wavelength-shifting and light-guiding technology is currently developed in Mainz. The successful candidate is expected to play a major role in the development and optimization of this new technology, as well as in establishing its scientific potential for IceCube-Gen2.

Please send your application **by January, 15th 2016**, including

- a letter of motivation (max. 1 page)
- your curriculum vitae
- a letter of reference (sent directly from the referee)
- a copy of your relevant certificates

to the address given below (electronic documents preferred). The position is limited to a duration of two years. Please do not hesitate to contact Sebastian Böser (sboeser@uni-mainz.de, Tel: 06131-39 23865) in case of any questions.

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