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Postdoctoral Opportunities in Astroparticle Physics at SungKyunKwan University, South Korea

The [Neutrino AstroParticle Physics Lab \(NAPPL\)](#) group lead by [Prof. Carsten Rott](#) at [Sungkyunkwan University \(SKKU\)](#) has an immediate opening for a postdoctoral fellowship. Successful candidates will join our team to work on the [IceCube Neutrino Observatory](#) and the IceCube Upgrade. The research focus of the group is identifying the origin of the recently discovered high-energy astrophysical neutrino flux with a particular focus on scenarios that involve physics beyond the standard model. Our group is leading searches for dark matter, solar atmospheric neutrinos, and an effort to build a novel ice-camera calibration system. The system will be deployed with the IceCube Upgrade to enhance our understanding of the optical properties of the detector medium. This in turn is expected to result in a reduced neutrino pointing uncertainty, which is critical for multi-messenger science.

The IceCube Upgrade is an addition of seven detector strings in the deep, clear Antarctic ice at the bottom center region of the IceCube Neutrino Telescope, that will be deployed in 2022/2023. It is expected that successful the candidate assumes a leadership role in the IceCube Upgrade detector calibration and data analyses. The successful applicant will help guide a team of graduate and undergraduate students from our group.

Based on the applicants research interest and expertise the successful candidate may also pursue opportunities in other projects. Our group has currently critical involvements in the [JSNS2 sterile neutrino search](#), [Hyper-Kamiokande](#) (with potential extension to include a [large volume neutrino detector in Korea](#)), and the [COSINE](#) dark matter search.

Candidates should hold a Ph.D. or have recently submitted their thesis in experimental particle physics, astroparticle physics, or a related field. The initial appointment will be for one year with the expectation that the contract will be renewed annually pending research performance. Senior candidates can be appointed at the level of research professor.

To apply, please send your CV, list of publications with your contributions highlighted, and a short research statement to Prof. Carsten Rott rott@skku.edu. Applicants should arrange for at least two letters of recommendation to be sent directly to the same address. For full consideration please ensure all documents are received by Sunday June 14th, 2020.

More information about the group and current research efforts can also be found on our [homepage](#). If you have any questions or would like to get further information please feel free to contact Prof. Carsten Rott rott@skku.edu.