## **Our Team**

## Chang Kee Jung

Kavli IPMU Professor

My current research interests and activities are focused on the following two areas: experimental search for proton decays - a direct evidence for (grand) unification, and measurements of neutrino properties, in particular CP violating phase, that may eventually lead us to resolve the matter-antimatter asymmetry mystery in the universe. I have been pursuing these goals through my participation in the Super-Kamiokande, K2K and T2K experiments. I will also participate in the future experiments to pursue these goals further. In addition I am very much interested in detecting neutrinos from supernovae, search for neutrino-less double beta

decay and search for dark matter. I currently serve as International Co-Spokesperson of the T2K collaboration. Nature kindly gave us the non-zero neutrino mixing angles in order for us to be able to probe CP violation in the lepton sector. May Nature be kind to us again and provide us with a large CP violation!

## Amir Babak Aazami Research Area: Mathematical Physics Postdoc

Research Area: Experimental Physics

My research interests revolve around spacetime singularities, black holes, and gravitational lensing. Spacetime singularity theorems are regarded as statements about physics, but they are also purely mathematical: they help to classify geodesically (in)complete Lorentz manifolds. One of my goals is to arrive at a deeper geometric understanding of this classification, as well as a deeper geometric understanding of the relation between a spacetime singularity and a black hole. Beyond this, I am



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interested in the phenomenon of magnification in gravitational lensing. I am delighted to join Kavli IPMU, because it encourages interdisciplinary pursuits such as these.