JAEA/KEK joint mini-workshop on Quantum phenomena in scatterings

June 12 (Wed), 2019, 5th Meeting Room, Research Building 1 (研究1棟第5会議室), 13:30~

13:30 Kazuki Yoshida, ASRC

Title: Role of the spin-orbit potential in nuclear elastic scattering **Abstract:** I introduce a basic concept of the nucleon-nucleus elastic scattering and the role of the spin-orbit potential. Contents of this talk are not at all new nor pioneering, but may bring us common understanding of different systems on which spin-orbit interaction acts.

14:20 Denny Sombillo, RCNP&U. Philippine

Title: Pole trajectories in coupled-channel S-matrix and observables

Abstract: Analytic properties of S-matrix as functions of the energy of coupled-channels are studied. We employ a separable model to show how poles of S-matrix move on a set of Riemann sheets as parameters are varied and discuss the effect of coupled channels on the structure of cross sections.

Break

15:30 Kiyoshi Tanida, ASRC

Title: How a resonance could look?

Abstract: Quite often, hadron resonances are identified as peak structures in mass spectra, and properties such as mass and width are obtained by fitting to simple Breit-Wigner forms. However, these are not always correct. I will discuss a few cases how dangerous such treatments are.