

3rd Jagiellonian Symposium on Fundamental and Applied Subatomic Physics



Contribution ID: 96

Type: **invited talk**

Calculations of mesic nuclei

Tuesday, 25 June 2019 18:25 (25 minutes)

This contribution reviews recent studies of K^- and η nuclear quasi-bound states performed by the Jerusalem-Prague Collaboration using potentials derived from state-of-the-art chirally motivated meson-baryon coupled-channel interaction models.

Energy and density dependence of the scattering amplitudes, implications of self-consistent treatment, as well as the role of meson multi-nucleon interactions are discussed. Calculations of few-body as well as many-body nuclear systems are presented.

Primary author: MARES, Jiri (Nuclear Physics Institute of the Czech Academy of Sciences)

Co-authors: CIEPLY, A (Nuclear Physics Institute of the Czech Academy of Sciences); HRTANKOVA, J (Nuclear Physics Institute of the Czech Academy of Sciences); SCHAEFER, M (Nuclear Physics Institute of the Czech Academy of Sciences); BARNEA, N (Racah Institute, The Hebrew University, Israel); FRIEDMAN, E (Racah Institute, The Hebrew University, Israel); GAL, A (Racah Institute, The Hebrew University, Israel)

Presenter: MARES, Jiri (Nuclear Physics Institute of the Czech Academy of Sciences)

Session Classification: Tuesday