## **BPU11 CONGRESS**



Contribution ID: 61 Contribution code: S05-HEP-212

Type: Poster presentation (virtual)

## Lattice QCD simulations using Borici - Creutz fermions

Wednesday, 31 August 2022 11:32 (2 minutes)

Minimally doubled fermions are a class of lattice fermions, which preserve exact chiral symmetry and are strictly local, details that make them very suitable for lattice simulations. Borici - Creutz fermions are one kind of minimally doubled fermions that have certain properties adaptable for lattice studies and simulations. In this work we present some of the lattice simulations made by using this kind of fermions, in light hadrons spectrum and spontaneous chiral symmetry breaking. We study and analyze the properties which make them desirable and the problems they show in lattice simulations.

**Primary authors:** Dr OSMANAJ (ZEQIRLLARI), Rudina (Faculty of Natural Sciences, Department of Physics, University of Tirana); Dr XHAKO, Dafina (Department of Physics Engineering, Faculty of Mathematical Engineering and Physical Engineering, Polytechnic University of Tirana, Tirana, Albania.); Dr CACA, Enkelejd (Department of Physics Engineering, Faculty of Mathematical Engineering and Physical Engineering, Polytechnic University of Tirana, Tirana, Albania.); Dr CACA, Enkelejd (Department of Physics Engineering, Faculty of Mathematical Engineering and Physical Engineering, Polytechnic University of Tirana, Tirana, Albania.);

**Presenter:** Dr OSMANAJ (ZEQIRLLARI), Rudina (Faculty of Natural Sciences, Department of Physics, University of Tirana)

Session Classification: Poster session (virtual)

Track Classification: Scientific Sections: S05 High Energy Physics (Particles and Fields)