XII International Conference on New Frontiers in Physics
10-23 July 2023, OAC, Kolymbari, Crete, Greece

Contribution ID: **99** Type: **Talk**

Light flavored strange tetra quarks in diquark-antidiquark potential model

We have computed the mass spectra of light flavored strange tetra quark within the framework of diquark-antidiquark potential model along with the incorporation of spin-dependent terms to describe the splitting structure for orbital and radial excitations. We have successfully evaluated the experimentally observed ground state masses of light mesons to fit the model's parameters which are used to obtain the mass spectra of tetraquarks. Further we calculate the decay properties of these light flavored tetraquarks. The obtained results will provide insight about light exotic hadrons in future experiments.

Is this abstract from experiment?

No

Name of experiment and experimental site

NA

Is the speaker for that presentation defined?

Yes

Details

Chetan Lodha, Light flavored strange tetra quarks in diquark-antidiquark potential model, Sardar Vallabhbhai National Institute of technology Surat, India. https://www.svnit.ac.in/

Internet talk

Yes

Authors: Mr LODHA, Chetan (Sardar Vallabhbhai National Institute of Technology Surat, Gujarat, India); PATEL, Vandan (Sardar Vallabhbhai National Institute of Technology Surat, Gujarat, India); Dr TIWARI, Rohit (Sardar Vallabhbhai National Institute of Technology Surat, Gujarat, India); Ms OUDICHHYA, Juhi (Sardar Vallabhbhai National Institute of Technology Surat, Gujarat, India); Dr RAI, Ajay Kumar (Sardar Vallabhbhai National Institute of Technology Surat, Gujarat, India)

Presenter: Mr LODHA, Chetan (Sardar Vallabhbhai National Institute of Technology Surat, Gujarat, India)

Session Classification: Workshop on Laser Fusion, a spin-off from heavy-ion collisions

Track Classification: Workshops & Special Sessions: Workshop on Laser Fusion, a spin-off from heavy-ion collisions