

Contribution ID: 261 Type: Poster

Some phenomenology from the lattice: decay constants and sigma terms.

Thanks to the recent developments both in our understanding of lattice simulations and in computer power, lattice gauge theory can give accurate predictions of QCD with all the sources of error under control. After a brief survey on the difficulties of these computations, I would review some interesting recent results of the Budapest-Marseille-Wuppertal lattice collaboration: First pi and K decay constants can be used to compute CKM matrix elements and check the unitarity relation. Second the strange content of the nucleon is key to understand how dark matter could be detected. During the talk I will emphasize how the different sources of error are controlled to make physical predictions.

Primary author: Dr RAMOS, Alberto (CNRS)

Presenter: Dr RAMOS, Alberto (CNRS)

Track Classification: 09 - Progress in Lattice Techniques and New Results