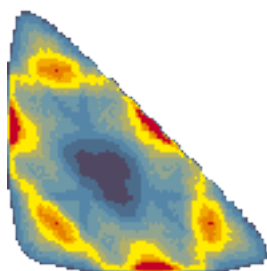


School on Concepts of Modern Amplitude Analysis Techniques



Wednesday 18 September 2013 - Thursday 26 September 2013

Scientific Program

Scientific Program

Amplitude analysis is a mandatory tool to study few-particle decays, since the resulting spectra (Dalitz plots and generalizations thereof) in general contain very rich structures. These structures teach us a lot about the spectrum of hadrons and their intrinsic properties to unveil e.g. the mystery of strong binding and the question of a much richer spectrum than only conventional mesons and baryons. But the physics opportunities reach much beyond this. Any observable appearing in interference effects of hadron production and decay will be accessible this way, which opens the door to electroweak physics and physics beyond the standard model. Thus to interpret the data it is necessary to use amplitude analysis, that allows not only to extract resonance properties but also to extract strong and weak phases with high sensitivity and accuracy.

Topics dedicated especially to experimentalists

Introduction to Concepts and Frameworks

Complex Analysis - Adam Szczepaniak, Bloomington, IN

Dispersion Integrals - Jose Pelaez, Madrid

Dynamics, K-Matrix and more - Michael Pennington, Newport News, VA

K-Matrix Applications Examples and practical aspects - Klaus Peters, Darmstadt

Spin Formalisms and Examples - Boris Grube, Munich

Chiral PT - Stefan Scherer, Mainz

Statistics in spectroscopy experiments - Frank Porter, Pasadena, CA

Students Presentations and Discussion Sessions

Timeline

The event will start at 8:30 am on Wednesday, September 18, 2013 and end around 5:45 pm on Thursday, September 26, 2013. We strongly encourage all participants to arrive on the evening of September 17 and depart on the morning September 27, and join us throughout the entire event.