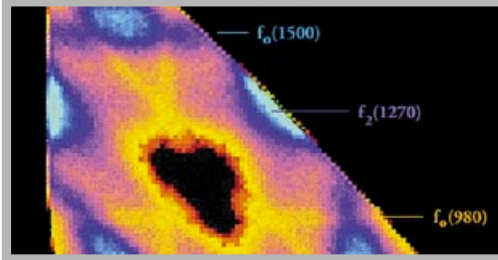


# ATHOS12

Camogli, Italy  
June 19-22 2012

## NEW PARTIAL WAVE ANALYSIS TOOLS FOR NEXTGENERATION HADRON SPECTROSCOPY EXPERIMENTS



## WORKSHOP PROGRAM

### Tuesday 19th

19:00 Welcome reception at the Castello della Dragonara

### Wednesday 20th - Current status of experiments and theory

09:00 - 09:20 Welcome

Arch. G.Risicato (Assessore alla Cultura – Comune di Camogli)

Prof. M.Taiuti (Chairman of the INFN Nuclear Physics Committee)

09:20 - 10:40 Session 1:

09:20 - 10:00 Multi-particle partial wave analysis: from Regge theory and duality to the cloud - *G. Fox (Indiana University)*

10:00 - 10:40 Overview of meson spectroscopy experiments and data - *C. Meyer (Carnegie Mellon University)*

10:40 - 11:00 Coffee Break

11:00 - 12:30 Session 2:

11:00 - 11:30 Dynamically generated resonances versus CCD poles - *E. Klempt (University of Bonn)*

11:30 - 12:00 Spectroscopy of multi-quark states - *A. Polosa (Università di Roma La Sapienza)*

12:00 - 12:30 Future facilities for hadron spectroscopy - *P. Gianotti (INFN-LNF)*

12:30 - 14:30 Lunch

14:30 - 16:00 Discussion Session - Theory

*Conveners: V. Mathieu and J. Pelaez*

Brief comparison between ongoing dynamical couple-channel analyses for  $N^*$  extraction (15'+5') - *B. Julia-Diaz (ICFO- Castelldefels)*

Towards a unified description of  $\gamma\gamma \rightarrow \pi^0\pi^0 e^+ e^-$  (15'+5') - *B. Moussalam (IPN-Orsay)*

Review of scalar mesons below 2 GeV (15'+5') - *Simon Eidelman (Budker Institute of Nuclear Physics)*

Discussion (30')

16:00 - 16:30 Coffee Break

16:30 - 18:00 Discussion Session - Experiment

*Conveners: C. Bini and B. Ketzer*

Search for exotics in three pion production at COMPASS (10'+5') - *S. Neubert (TU-Munchen)*

Search for exotics in three pion production at CLAS (10'+5') - *P. Eugenio (Florida State University)*

Recent results on  $\pi\pi$  amplitudes at BES III (10'+5') - *B. Liu (Institute of High Energy Physics)*

Discussion (45') - Contributions from S. Piano, C. Salgado and others.

## Thursday 21th - Analysis Tools

09:00 - 10:30 Session 3:

09:00 - 09:45 Analysis tools: the light quark sector - *S. Paul (TU-Munchen)*

09:45 - 10:30 Analysis Tools: the heavy quark sector - *G. Cavoto (INFN-Roma)*

10:30 - 11:00 Coffee Break

11:00 - 12:30 Session 4:

11:00 - 11:30 The necessary experiments for the future of meson spectroscopy  
*D. Bugg (University of London)*

11:30 - 12:00 Dynamical coupled-channel approach for meson production reaction  
*T. Sato (Osaka University)*

12:00 - 12:30 Dispersion relations for 3 pion decays and transition factors  
*S. Schneider (HISKP Bonn)*

12:30 - 14:30 Lunch

14:30 - 16:00 Discussion Session: Theory

*Conveners: M. Doring and B. Zou*

Introduction by the conveners

Reaction mechanisms for photoproduction of strange exotics (15') - *A. Afanasev (George Washington University)*

Neutron-target data for pion photoproduction (15') - *I. Strakovsky (George Washington University)*

Toward a model independent determination of resonance parameters (15') - *L. Tiator (University of Mainz)*

PWA approach for  $J/\psi$  decays at BES (15') - *J. Wang (Institute for High Energy Physics)*

Discussion - Contributions from L. Bibrzycky, S. Krewald, G. Galatà and others.

16:00 - 16:30 Coffee Break

16:30 - 18:00 Discussion Session: Experiment

*Conveners: R. Mitchell and D. Ireland*

How do we practically incorporate theoretical innovations into experimental fits to data? (10'+5')

*R. Mitchell (Indiana University)*

Considering the large data sets soon to be available and the development of more sophisticate amplitudes, how do we increase the speed of our fits? (10'+5')

*B. Grube (CERN, Technical University Munich)*

How do we decide when a fit is "good enough"? (10'+5')

*M. Williams (Imperial College London)*

Dalitz plot analysis: a case history (10')

*K.Seth (Northwestern University)*

Discussion - Contributions from A. Filippi and others.

19:30 Social Dinner

## Friday 22th - Summary

09:00 - 10:30 Discussion Session Summaries

*J. Pelaez, V. Mathieu, M. Doring, B. Zou*

10:30 - 11:00 Coffee Break

11:00 - 12:30 Discussion Session Summaries by conveners

*B. Ketzer, C. Bini, R. Mitchell, D.Ireland*

12:30 - 12:45 Ending remarks