

EEF70

Workshop on Unquenched Hadron Spectroscopy:

Non-Perturbative Models and Methods of QCD vs. Experiment

1–5 September 2014 at the University of Coimbra, Portugal

Venue: Physics Department, 1st floor (above ground floor), lecture room AD.1

http://cfif.ist.utl.pt/~rupp/EEF70/From_Residencial-Botanico_to_Physics-Department.pdf

<http://cfif.ist.utl.pt/~rupp/EEF70/Physics-Department.pdf>

Scientific Programme

Status: 4 September 2014

Mon 1st	Tue 2nd	Wed 3rd	Thu 4th	Fri 5th
chair persons	chair persons	chair persons	chair persons	chair persons
morning A. Szczepaniak B. Moussallam	morning M. Takizawa E. Santopinto	morning	morning R. Kaminski H. Reinhardt	morning C. Lang X. Liu
afternoon S. Takeuchi J. Peláez	afternoon A. Palano F. Kleefeld	afternoon M. Pennington M. Pelizaeus	afternoon Gy. Wolf F. Nerling	afternoon K. Khemchandani

Monday, 1 September 2014

Morning Session

Chair persons: A. Szczepaniak (before the break), B. Moussallam (after the break).

Time	Speaker	Title
8.30–9.00		Registration
9.00–9.15	B. Hiller	Opening address
9.20–10.05	M. Pennington	<i>The brief life of a hadron: QCD unquenched</i>
10.10–10.40	E. Santopinto	<i>Higher charmonia and bottomonia in an unquenched quark model</i>
coffee break		
11.10–11.40	K. Khemchandani	<i>Problems with meson spectroscopy involving perturbative loop corrections</i>
11.45–12.15	T. Burns	<i>Meson mass splittings in unquenched quark models</i>
12.20–12.50	M. Cardoso	<i>A unitarised model for tetraquarks with a colour flip-flip potential</i>

Afternoon Session

Chair persons: S. Takeuchi (before the break), J. Peláez (after the break).

Time	Speaker	Title
14.45–15.30	M. Takizawa	<i>Summary of results on spectroscopy from Belle</i>
15.35–16.20	M. Pelizaeus	<i>Recent results from charmonium spectroscopy at BES-III</i>
tea break		
16.50–17.20	W. Broniowski	<i>Large-N_c Regge phenomenology</i>
17.25–17.55	P. Bicudo	Tetraquarks
18.00–18.30	Broniowski, Santopinto, Szczepaniak	Short panel discussion of day 1 topics

Tuesday, 2 September 2014

Morning Session

Chair persons: M. Takizawa (before the break), E. Santopinto (after the break).

Time	Speaker	Title
9.00–9.45	A. Palano	<i>New results on charmonium physics from the BaBar experiment</i>
9.50–10.35	A. Szczepaniak	<i>New opportunities and challenges in hadron spectroscopy</i>
coffee break		
11.05–11.35	J. Peláez	<i>Non-ordinary Regge trajectory of the σ meson</i>
11.40–12.10	B. Moussallam	<i>Scalar mesons in isospin-violating τ decays</i>
12.15–12.45	R. Kaminski	<i>What happened with the $f_0(500)/\sigma$ meson – theory and experiment</i>

Afternoon Session

Chair persons: A. Palano (before the break), F. Kleefeld (after the break).

Time	Speaker	Title
14.30–15.15	C. Lang	<i>Hadron scattering from a lattice perspective</i>
15.20–15.50	P. Silva	<i>Aspects of gluon propagation in Landau gauge: spectral densities and mass scales at finite temperature</i>
15.55–16.25	F. Kleefeld	<i>Strong interactions with quarks and mesons – on unitarisation including bound states and non-Hermitian quantum theory</i>
tea break		
16.55–17.25	S. Leitão	<i>Mesons in a covariant quark-constituent formalism</i>
17.30–18.00	G. Rupp	<i>No serious meson spectroscopy without scattering</i>
18.05–18.35	Lang, Palano, Peláez	Short panel discussion of day 2 topics

Wednesday, 3 September 2014

10.00-12.00: Social Programme – Visiting the University of Coimbra

Afternoon Session

Chair persons: M. Pennington (before the break), M. Pelizaeus (after the break).

Time	Speaker	Title
14.00–14.45	E. van Beveren	<i>Unquenching weak substructure</i>
14.50–15.20	X. Liu	<i>The initial-chiral-particle-emission mechanism and the predictions of charged charmonium-like structures</i>
15.25–16.10	F. Nerling	<i>Newest results from the COMPASS experiment at CERN</i>
tea break		
16.40–17.25	A. Palano	<i>Recent LHCb spectroscopy results</i>
17.30–18.00	Beveren, Nerling, Palano	Short panel discussion of day 3 topics

19.30: Workshop Dinner at Hotel Dom Luís

Bus leaves at 19.15 from the Physics Department

Thursday, 4 September 2014

Morning Session

Chair persons: R. Kaminski (before the break), H. Reinhardt (after the break).

Time	Speaker	Title
9.30–10.00	Gy. Wolf	<i>Extended linear σ model at non-zero temperature and non-zero density</i>
10.05–10.35	A. Habersetzer	<i>τ vector and axial-vector spectral functions in the extended linear σ model</i>
coffee break		
11.05–11.35	B. Hiller	<i>The three-flavour NJL Lagrangian with explicit-symmetry-breaking interactions: scalar & pseudoscalar meson spectra and decays</i>
11.40–12.10	J. Moreira	<i>Non-uniform phases in a three-flavour 't Hooft extended Nambu–Jona-Lasinio model</i>
12.15–12.45	J. Morais	<i>The T-μ phase diagram of the NJL model in presence of explicit symmetry-breaking interactions</i>

Afternoon Session

Chair persons: Gy. Wolf (before the break), F. Nerling (after the break).

Time	Speaker	Title
14.45–15.15	C. Providência	<i>The QCD critical end point driven by an external magnetic field</i>
15.20–15.50	B. Golli	<i>Meson-cloud effects in nucleon resonances at low and intermediate energies</i>
15.55–16.25	D. Parganlija	<i>Holographic glueball decay</i>
tea break		
16.55–17.25	A. Blin	<i>Neutrinos and the average thermal evolution of the universe</i>
17.30–18.00	Golli, Hiller, Kaminski	Short panel discussion of day 4 topics

Friday, 5 September 2014

Morning Session

Chair persons: C. Lang (before the break), X. Liu (after the break).

Time	Speaker	Title
9.00–9.45	H. Reinhardt	<i>Hamiltonian approach to QCD in Coulomb gauge: deconfinement from confinement</i>
9.50–10.35	F. Nerling	<i>Prospectives of the PANDA experiment at FAIR</i>
10.40–11.10	A. Martínez Torres	<i>X(3872) production in high-energy heavy-ion collisions</i>
coffee break		
11.40–12.10	S. Takeuchi	<i>On the origin of the narrow peak and the isospin-symmetry breaking of the X(3872)</i>
12.15–12.45	M. Cardoso	<i>X(3872) electromagnetic decay in a coupled-channel model</i>

Afternoon Session

Chair person: K. Khemchandani (before the break).

Time	Speaker	Title
14.30–15.00	P. Alberto	<i>Pseudospin and spin symmetries in the Dirac equation for confining potentials with application to the Coulomb potential in 1 + 1 dimensions</i>
15.05–15.35	T. Wolkanowski	<i>Dynamical generation of hadronic resonances</i>
tea break		
16.05–17.45	Beveren, Lang, Pennington, Reinhardt, Takizawa	General panel discussion of workshop results
17.50–18.00	G. Rupp	Closing address