



# **Caucasian-German School and Workshop on Hadron Physics**

UNESCO Regional Bureau for Science in Europe  
Georgian Academy of Sciences – Tbilisi State University

30.08.2004 – 04.09.2004  
Tbilisi, Georgia

## Monday, August 30 (10<sup>00</sup> – 19<sup>00</sup>)

**Chairman: Academician Albert Tavkhelidze**

- 10<sup>00</sup> Uwe Schramm (*German ambassador*): Welcome address 10'
- L1 Hans Ströher: Status and perspectives of hadron physics in Europe 30'
- T1 Colin Wilkin: Meson production in  $pp$ ,  $pn$ ,  $dp$  and  $dd$  interactions 30'
- T2 Volker Hejny:  $\eta$  production in  $dd$  interactions 20'
- T3 Timo Mersmann: Investigation of the  ${}^3\text{He}\eta$ -system 15'
- T4 Yury Valdaу:  $K^+$  production in  $pn$  interactions 15'

**12<sup>00</sup> - 12<sup>20</sup> Coffee break**

**Chairman: Prof. Hans Ströher**

- T5 Vera Kleber: Light scalar meson production at COSY 20'
- T6 Vadim Baru: Theoretical model for scalar meson production 20'
- T7 Irakli Keshelashvili:  $\Phi$ -meson production in  $pp$  interactions 20'
- T8 Yoshikazu Maeda:  $\Phi$ -meson production in  $pn$  interactions 15'

**13<sup>35</sup> - 15<sup>00</sup> Lunch break**

- T9 Yury Uzikov: Parity determination of the pentaquark in  $NN$  collisions 25'
- T10 Wolfgang Eyrich: Search for the pentaquark  $\Theta^+$  state 30'
- T11 Vladimir Koptev: Pentaquark search at ANKE 15'
- T12 Ashot Gasparyan: Hyperon-nucleon interaction and strangeness production 20'
- T13 Mikhail Nekipelov: Experiments on in-medium  $K^+$ -meson production 20'
- T14 Michael Hartmann: Plans for  $K^-$  production in  $pA$  reactions at ANKE 20'

**17<sup>10</sup> - 17<sup>30</sup> Coffee break**

**Chairman: Prof. Mikheil Nioradze**

- T15 Izabella Zychor: Evidence for a new  $Y^*$  hyperon in  $pp$  collisions at ANKE 20'
- T16 Wolfgang Schroeder: Strong contribution of the  $N^*$  resonances in the  $\Lambda$  production at TOF 20'
- L2 Revaz Shanidze: Astroparticle physics with hadrons and leptons 30'
- L3 Akaki Liparteliani: Rare beauty as windows onto extra dimensions 30'
- 20<sup>00</sup> Georgian movies

## Tuesday, August 31 (9<sup>00</sup> – 18<sup>00</sup>)

**Chairman: Prof. Colin Wilkin**

L4	Frank Rathmann: Polarization experiments in storage rings	30'
L5	Erhard Steffens: Polarized beams	30'
T17	Bernd Lorentz: Polarimetry at COSY	20'
T18	David Chiladze: Deuteron polarimetry at ANKE	20'
T19	Ralf Engels: Polarized internal target at ANKE	20'
T20	Kirill Grigoriev: Cell tests for ANKE	15'

### 11<sup>15</sup> - 11<sup>35</sup> Coffee break

T21	Manfred Dillig: Short range dynamics in the $pp$ and the $pd$ system	30'
T22	Pia Engblom: Spin dependence in $pd$ reactions at intermediate energy	25'
T23	Yury Uzikov: The deuteron breakup reaction ( $\vec{p}\vec{d}$ ) (theory)	20'
T24	Sergey Yaschenko: The deuteron breakup reaction ( $\vec{p}\vec{d}$ ) ( $d\sigma/d\Omega$ )	20'
T25	George Macharashvili: The deuteron breakup reaction ( $\vec{p}\vec{d}$ ) ( $A_y$ )	20'

### 13<sup>30</sup> - 15<sup>00</sup> Lunch break

**Chairman: Prof. Teimuraz Kopaleishvili**

T26	Ruprecht Machleidt: $NN$ interaction at intermediate energy	45'
T27	Colin Wilkin: Polarized charge-exchange reaction (theory)	25'
T28	Andro Kacharava: Polarized charge-exchange reaction (experiment)	20'
T29	Viktor Glagolev: The charge-exchange reaction studies at JINR	15'
T30	Ralf Schleichert: Double polarization $pn$ experiments	25'

### 17<sup>10</sup> - 17<sup>30</sup> Coffee break

L6	Hellmut Seyfarth: Spin effects in hydrogen and deuterium recombination	30'
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### 19<sup>00</sup> - 19<sup>45</sup> Evening Lecture (in Georgian)

L7	Andro Kacharava: Jülich and its Research Center: History, Present and Future	45'
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## Thursday, September 2 (9<sup>00</sup> – 18<sup>30</sup>)

**Chairman: Prof. Erhard Steffens**

- T31 Magnus Wolke:** WASA at CELSIUS and  $\eta'$  decays with WASA at COSY 30'
- T32 Markus Büscher:** Key experiments for WASA at COSY 25'
- T33 Carsten Schwarz:** Hadron physics at FAIR (PANDA, CBM) 30'
- T34 Raimund Tölle:** HESR-project in FAIR at GSI 20'
- L8 Nikolay Nikolaev:** Spin physics in QCD 30'

**11<sup>15</sup> - 11<sup>35</sup> Coffee break**

- T35 Nikolay Nikolaev:** Double spin asymmetry (transversity) 30'
- T36 Paolo Lenisa:** Polarized Antiproton Experiments (PAX) 30'
- T37 Marco Contalbrigo:** PAX detector concept 30'
- T38 Leila Chiqovani:** Study of top quark rare decays via FCNC at LHC 25'

**13<sup>30</sup> - 15<sup>00</sup> Lunch break**

**Chairman: Prof. Anzor Khelashvili**

- T39 Detlev Gotta:** Hadronic atoms (experiment) 30'
- T40 Dieter Grzonka:** Nuclear and particle physics with FLAIR at FAIR 30'
- T41 Temur Nadareishvili:** Problem of additional solutions in the nonrelativistic and relativistic equations 30'

**16<sup>30</sup> - 17<sup>00</sup> Coffee break**

- T42 Mirian Tabidze:** Bose-Einstein correlation from the DELPHI data 25'
- T43 Archil Garishvili:** A search for R-parity violating scalar top decays in  $e^+e^-$  collisions 20'
- T44 Revaz Shanidze:** Initiative for a TANDEM regional center for Caucasus 30'
- 18<sup>15</sup> Hans Ströher:** Workshop Summary

**19<sup>30</sup> Banquet**