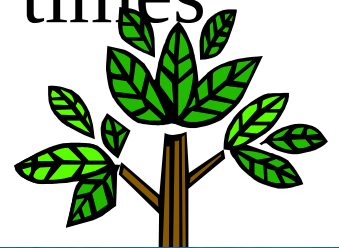


“Zakopane”?

# Among Physicists: Cracow School of Theoretical Physics

The oldest physics school of modern times



of Theoretical Physics

# Zakopane 1961

Had I only known,  
I was near



# Zakopane 1987

Note: QGP and Superstrings=non perturbative methods; in one line 20y ahead of its time

## XXVII CRACOW SCHOOL of Theoretical Physics

*June 3-15, 1987, Zakopane, Poland*

### Structure of Fundamental Interactions

The School is organized by  
**Institute of Physics, Jagellonian University**  
in collaboration with  
**Institute of Nuclear Physics**  
and **Copernicus Astronomical Center, Polish Academy of Sciences**  
Kraków, Poland

*Topics include:* quark-gluon plasma, superstrings,  
nonperturbative methods and  
recent experimental results

*Lecturers include:*

<b>B. Buschbeck</b> , Vienna	<b>A. Krzywicki</b> , CERN
<b>A. Casher</b> , TelAviv	<b>F. Lobkowicz</b> , Rochester
<b>I.T. Diatlov</b> , Leningrad	<b>U. Maor</b> , TelAviv
<b>M. Derrick</b> , Argonne	<b>A.A. Migdal</b> , Moscow
<b>M. Duff</b> , CERN	<b>S. Nussinov</b> , TelAviv
<b>L.L. Frankfurt</b> , Leningrad	<b>B. Petersson</b> , Bielefeld
<b>H. Fritzsche</b> , CERN	<b>J. Rafelski</b> , Capetown
<b>U. Heinz</b> , Brookhaven	<b>I. Sarcevic</b> , Los Alamos
<b>G. 't Hooft</b> , Utrecht	<b>H. Satz</b> , Bielefeld
<b>F. Karsch</b> , CERN	<b>K. Sibold</b> , MPI Munich
<b>J.G. Taylor</b> , King's College, London	

■ — not yet confirmed

*Place:* Zakopane, a picturesque spot in Tatra Mountains, Hotel DW "Świerk",  
Zakopane, Piaseckiego 14a, Tel (0165) 50 01  
*Day of arrivals:* June 3; *day of departures:* June 15.  
*Cost of the School incl. board and lodging:* US\$ 200.  
No special application form required.

*Mailing address:* Dr W. Słomiński, Institute of Physics,  
Jagellonian University, PL-30-059 Kraków, Reymonta 4  
P O L A N D  
Tel.: (012) 33 91 68; (012) 33 63 77 ext. 568  
Tlx.: 322723





# XXXVII Cracow School of Theoretical Physics

## Dynamics of Strong Interactions

30 May – 10 June 1997  
Zakopane, Poland

**Invited speakers:**  
 B. Andersson\* (Lund)  
 G. Baym (Urbana)  
 H. Biłkowska (Warsaw)  
 J.D. Bjorken (SLAC)  
 J.P. Blaizot (Saclay)  
 W. Busza (MIT)  
 A. Di Giacomo (Pisa)  
 J.M. Eisenberg (Tel Aviv)  
 J. Ellis (CERN)  
 S. W. Hoopes (Florence)  
 G.P. Korchemsky (Orsay)  
 G. Marchesini\* (Milan)  
 A.H. Mueller (Columbia)  
 M.A. Nowak (GSI)  
 J. Pita (Bratislava)  
 J. Polonsky (Arizona)  
 K. Rajaniemi (GSI)  
 R. Schaefer (Goethe)  
 J. Schukraft (CERN)  
 W.L. Van Neerven (Leiden)  
 J.D. Wells (CEBAF)  
 D. Wolf (DESY)

\*not yet confirmed

Place: "Tęcza" Hotel, Zakopane, Poland  
 Cost of food, accommodation and conference fee: 450 USD  
 Deadline for applications: 15 April 1997

Further information available from  
 Dr. Jan Czyżyński  
 Institute of Physics, Jagiellonian University  
 ul. Śniadeckich 4, PL-30-059 Kraków, Poland  
 E-mail: [jan@pan.iz.uj.edu.pl](mailto:jan@pan.iz.uj.edu.pl)  
 WWW: [www.iz.uj.edu.pl/](http://www.iz.uj.edu.pl/)

**Topics include:**  
 low-x physics, reggeization in QCD, confinement,  
 gauge theories at high temperature, chiral symmetry,  
 disoriented chiral condensate, quark-gluon plasma,  
 relativistic heavy-ion collisions, HBT correlations

**Sponsored by:**  
 PECO-NIS European Community Programme  
 KBN Committee for Scientific Research  
 Jagiellonian University

**Organized by:**  
 Institute of Physics, Jagiellonian University  
 Kraków, Poland  
 H. Niemiński (Instytut Fizyki, Uniwersytet Jagielloński, Kraków, Poland)

**Organizing Committee:**  
 A. Białas, W. Czyż, K. Głuchowski, M. Szaferkowski





# Zakopane 1997



- Hadronic signatures of deconfinement

Zakopane 1997:

- SHM Analysis of results of SPS experiments
- 200 GeV S-A Strangeness results consistent with QGP
- Thermal and near chemical equilibrium
- Transverse expansion at velocity of sound, no longitudinal scaling
- Production in plasma of strangeness with running QCD parameters
- Entropy / Multiplicity excess relation to QGP

- 1) Diagnosis of QGP with Strange Hadrons
- 2) Bc Production as Signal for Deconfinement

Zakopane 1999

- Slate of Predictions for RHIC – strange and heavy flavors – recombination model presented
- Full analysis of Pb-Pb CERN results in single freeze-out model with chemical nonequilibrium
- Entropy and hadron yield a key part of discussion



# Zakopane 2003





2003



# Strangeness and Statistical Hadronization – how to study QGP

- The energy scan produced the horn and we did point out that this is well described in chemical nonequilibrium hadronization
- Full analysis of RHIC 200 and 130 data points decisively to similar hadronization conditions as at SPS 200.
- Flow impact on hadronization temperature discussed

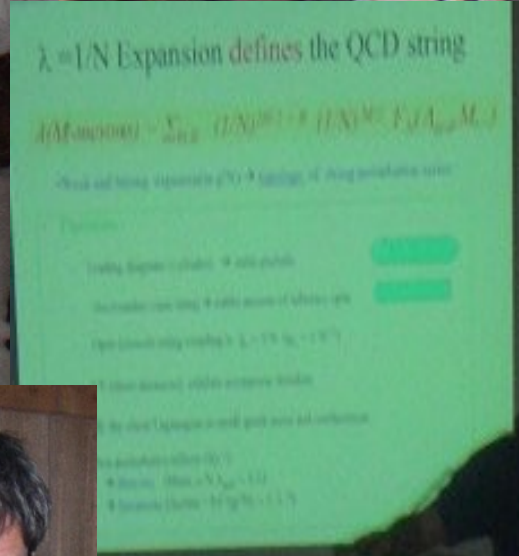
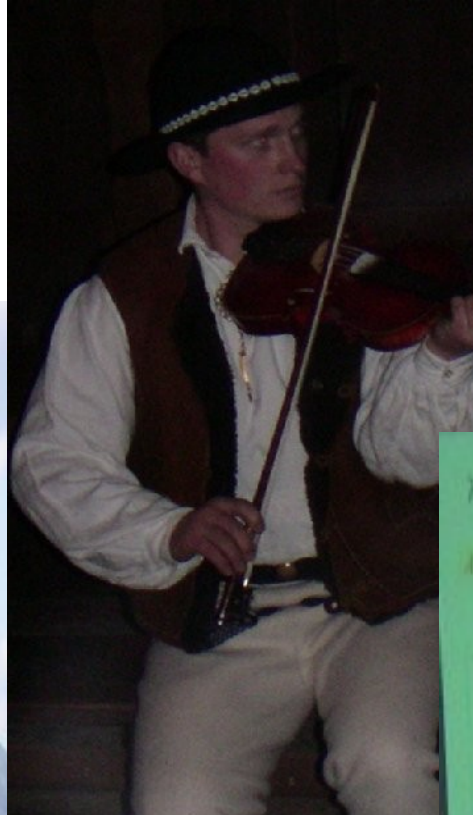


# Zakopane 2004



# Zakopane, Poland

## A striking experience





# Preschool activities



# The end of a beginning

