

May 3, Monday (MUZA): 13⁰⁰ - 17⁰⁰

Location: Kus Tba Road, Tbilisi. M. Berdzenishvili International Center of Culture "MUZA".

Existing Cooperation and Hadron Physics Project

13⁰⁰ – 13³⁰ Welcome Address:

- Georgian Minister – Dimitri Shashkini
- German Ambassador (Deputy) – Heike Gabriel
- Vice-Rector of TSU – Irine Darchia
- Rector of GTU – Archil Prangishvili

Ceremony session for signature:

- MoU between FZJ GmbH and Georgian Partner Institutions (TSU, GTU)
- Extension of Cooperation Agreement between IKP-FZJ and HEPI TSU

13³⁰ – 17⁰⁰ General Information:

- Hans Ströher (FZJ) – Scope of the Workshop
- Hans Ströher (FZJ) – Hadron Physics in Germany and Europe (COSY, FAIR)
- Rudolf Maier (FZJ) – The FAIR Project at GSI-Darmstadt (Accelerator part)

15⁰⁰ – 15³⁰ Coffee Break

- Frank Rathmann (FZJ) – The Quests for Polarized Antiprotons (PAX)
- Elena Abrosimova (FZJ) – Research and Career Opportunities at FZJ
- Andro Kacharava (FZJ) – Georgians at FZJ: Existing Collaborations

17⁰⁰ – 19⁰⁰ Reception by Universities

19⁰⁰ – 21⁰⁰ Social program (concert at MUZA)

May 4, Tuesday (TSU) 10⁰⁰ - 18³⁰

Location: 3. Chavchavadze Ave., Tbilisi. TSU, Building II.

Future Cooperation and Academic Training

- Welcome Address – Vice-Rector of TSU Irine Darchia
- Introduction to the Faculty of Exact and Natural Science – Dean, Ramaz Botchorishvili

Awarding ceremony of Doctor Honoris Causa

Prof. Dr. Hans Ströher

10³⁰ - 12⁰⁰ Hadron Physics Project – From COSY to FAIR

- Hans Ströher (FZJ/Cologne Uni) – The Need for Basic Science
- Frank Rathmann (FZJ/Erlangen Uni) – How to Polarize Antiprotons?
- David Chiladze (FZJ/HEPI TSU) – Instrumentation and Tools at COSY
- Irakli Keshelashvili (HEPI TSU/Basel Uni) – Experiments at ELSA (Bonn) and MAMI (Mainz) Electron Accelerators

12⁰⁰ – 12³⁰ Coffee Break

12³⁰ – 13³⁰ Field of the Atmospheric Chemistry

- Hendrik Elbern (FZJ/Cologne Uni) – Inverse Problems in Atmospheric Data Assimilation
- Ramaz Botchorishvili (TSU) – Numerical Models for Atmospheric Simulations

13³⁰ – 14³⁰ Lunch Break

14³⁰ - 15³⁰ Future collaborators: The New Partners

- Alexander Shengelaya (TSU) – Study of Novel Superconducting and Magnetic Materials using Muon Spin Rotation Technique
- Alexander Gamkrelidze (TSU) – Trends in Computer Science at TSU: Elementary Problems for Our Viewpoint

15³⁰ – 17⁰⁰ Invited Lectures

- Markus Büscher (FZJ/Cologne Uni) – Laser Technology in Particle Physics
- Detlev Gotta (FZJ/Cologne Uni) – Exotic Atoms

17⁰⁰ – 17³⁰ Coffee Break

17³⁰ – 18³⁰ Students Activity:

- Andria Agajanov – Self-adjoint extension of the operators in quantum
- Zara Bagdasarian – CTA design study
- Arnel Shakhbatian – Grid cluster at the Institute of High Energy Physics.

19⁰⁰ – 22⁰⁰ Social program

**May 5, Wednesday 9⁰⁰ – 20⁰⁰
Social Program (Excursion)**

May 6, Thursday (GTU) 10⁰⁰ - 19⁰⁰

Location: 77, Kostava Str., Tbilisi. GTU Administrative Building

Future Cooperation and Academic Training

- Welcome Address – Rector of GTU, Archil Prangishvili
- International Relationships of GTU: Past, Present, Future – Otar Zumburidze

10³⁰-13³⁰ Cooperation Partners from Germany (FZJ):

- Hans Ströher (FZJ/Cologne Uni) – Introduction to Research Center Jülich (IKP)
- Günter Hansen (FZJ) – Central Technology Division (ZAT)
- Andreas Wahner (FZJ/Cologne Uni) – Institute of Chemistry and Dynamics of Geosphere (ICG-2)

12⁰⁰ – 12³⁰ Coffee Break

- Torsten Markus (FZJ/RWTH) – Institute of Energy Research (IEF-2)
- Christoph Hanhart (FZJ/Bonn Uni) – Highlights and Challenges of Hadron Physics (IKP-Theory, Invited Lecture)

13³⁰ – 14³⁰ Lunch Break

14³⁰ – 17⁰⁰ Cooperation Partners from Georgia:

- David Tavkhelidze (GTU) – State of research and scientific works at GTU

- Elguja Kutelia (GTU) – Past, Present and Future of the Republic Center Structure Researches
- Olga Tsurtsunia (GTU) – Degradation of the Materials Used in the Energetic Systems and the Ways to Prolong Their Operation Time
- Zviad Kovziridze (GTU) – Composite Materials And Products Technology
- Vahtang Beridze (GTU) – Amino Acid Based Biodegradable Polymers – Promising Materials for Numerous Biomedical Applications
- Giorgi Kvesitadze (GTU) – Biotechnological Developments in Georgia

17⁰⁰ – 17³⁰ Coffee Break

17³⁰ – 18⁰⁰ Students Activity:

- Konstantin Magradze (GTU) – Maser's Program: Students Participation in Professional Development
- Lili Nadaraia (GTU) – Development and Investigation Of Nanocrystalline Composite Materials

18⁰⁰ – 19¹⁵ Visits/Sightseeing of Various Partner Institutions:

- Institute of Structures, Special Systems and Engineering Support of GTU

19³⁰ – 23⁰⁰ Social program (Banquet of Workshop)

May 7, Friday (MUZA) 10⁰⁰ - 13⁰⁰

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Strategy Discussion

Exchange Programs:

- Status of Georgian – German (GG) Collaborations (examples) – A. Kacharava
- Development of GG Cooperation:
 - Sommer Schools (Physics, Bad-Honnef 2010)
 - Schemes (Joint PhD programs) with other countries – E. Abrosimova
 - Concept of Virtual Institute (GGVIBS) – H. Ströher
 - Views from TSU – I. Darchia
 - Views from GTU – D. Tavkhelidze
- Organizational Issues (contact persons)
 - GNSF (representative)
 - DAAD (representative)
 - FZJ (E. Abrosimova)
 - TSU (representatives)
 - GTU (representatives)
 - Andronikashvili Physics Institute (representatives)
- Next Steps, Milestones

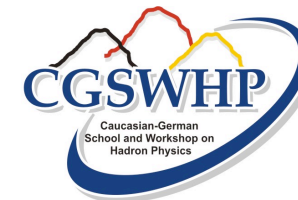
Concluding remarks:

- Germany – Hans Ströher
- Georgia – Ramaz Botchorishvili / Elguja Kutelia

13⁰⁰ – 14⁰⁰ Lunch Break

End of Workshop

19⁰⁰ – 21⁰⁰ Social Program (concert)



CGSWHP'10 (May 3 – 7), Tbilisi, Georgia
4th „Georgian – German School and Workshop
in Basic Science“

Topics:

EXISTING AND FUTURE HADRON PHYSICS PROJECTS AT COSY AND FAIR (EXPERIMENT, THEORY)

HADRON PHYSICS WITH POLARIZED ANTIPROTONS (SPIN-FILTERING)

DESIGN AND ENGINEERING FOR UPCOMING PROJECTS (HESR, PANDA, PAX)

PROJECTS IN MATERIAL SCIENCE

PROJECTS IN ATMOSPHERIC CHEMISTRY

INFORMATION TECHNOLOGY AND ADVANCED COMPUTING

EDUCATION OF FUTURE SCIENTIFIC AND ENGINEERING PERSONNEL