

# IML News

**Sergei V. Gleyzer (CMS)**

**Michele Floris (ALICE), Lorenzo Moneta (SFT)**

**Steven Schramm (ATLAS), Paul Seyfert (LHCb)**

**IML WG Meeting**

**Aug. 25, 2016**





- **Next meeting will be September 29**  
<https://indico.cern.ch/event/565647/>
- **Likely Topic: Software and Tools Updates**



- New ROOT release upcoming
- Will include significant Machine-Learning updates (TMVA)

**29 August 2016 - 3 September 2016**  
**Makedonia Palace conference centre,**  
**Thessaloniki, Greece**  
**<http://indico.cern.ch/e/conf12>**

#### **Organizing Committee**

Y. Foka (GSI) – chair  
N. Brambilla (TU Munich) – co-chair and scientific secretary

E. Andronov (SPbSU)  
R. Averbach (GSI)  
D. Bandekas (EMaTTech)  
P. Charitos (CERN)  
T. Dorigo (U. INFN, Padova)  
C. Eleutheriadis (AUTH, Greece)  
T. Geralis (Demokritos)  
L. Graczykowski (WUT)  
S. Harissopoulos (Demokritos)  
K. Iakovidis (N.T.U. Athens)  
A. Ioannidou (AUTH, Greece)  
M. Janik (WUT)  
A. Katanaeva (SPbSU)  
A. Kisiel (WUT)

#### **Section A: Vacuum Structure and Confinement**

D. Antonov (Heidelberg), M. Faber (TU Vienna), J. Greensite (San Francisco State U)

#### **Focus Subsection: Applications to strong matter**

T. Schaefer (NC State U), V. Shevchenko (NRC Kurchatov I.)

#### **Section B: Light Quarks**

J. Goly (Hampton U.), B. Ketzler (Bonn U.), H. Sazdjian (IPN Orsay), N. G. Stefanis (Ruhr U. Bochum), H. Wittig (JGU Mainz)

#### **Section C: Heavy Quarks**

G. Bodwin (Argonne NL), P. Pakhtov (ITEP, Moscow), J. Soto (U. Barcelona), A. Vairo (TU Munich)

#### **Section D: Deconfinement**

C. Allton (Swansea U.), E. Iancu (CEA/DSM/Saclay), M. Janik (WUT), P. Petreczky (BNL), A. Vuorinen (U. Helsinki)

#### **Section E: QCD and New Physics**

W. Detmold (MIT), M. Gersabeck (U. Manchester), F. J. Llanes-Estrada (UC Madrid), E. Mereghetti (Los Alamos NL)

# Today's Topic




- Unsupervised Learning
  - Use in HEP
  - Some examples
  - New Applications?

## IML Machine Learning WG Meeting - Unsupervised Learning



 25 Aug 2016, 15:00 → 17:30 Europe/Zurich













 222-R-001 - Filtration Plant (CERN)

### Videoconference Rooms

 LHC-MachineLearning-WG

Join

 Filtration Plant 

- |  |   |   |
|--|---|---|
| <b>15:00</b>   | → 15:15 <b>News and group updates</b>   |  15m      |
| <b>Speakers:</b> Lorenzo Moneta (CERN), Michele Floris (CERN), Paul Seyfert (Universita & INFN, Milano-Bicocca (IT)), Dr. Sergei Gleyzer (University of Florida (US)), Steven Randolph Schramm (Universite de Geneve (CH)) |   |   |
| <b>15:15</b>   | → 15:45 <b>Unsupervised Learning Introduction and Application to GeantV</b>   |  30m      |
| <b>Speaker:</b> Oksana Shadura (National Technical Univ. of Ukraine "Kyiv Polytechnic Institute)   |   |   |
| <b>15:45</b>   | → 16:10 <b>Optimisation of data storage</b>  |  25m      |
| <b>Speaker:</b> Nikita Kazeev (Yandex School of Data Analysis (RU))  |   |   |
| <b>16:10</b>   | → 16:35 <b>Web-based analysis tools and Machine Learning</b>  |  25m  |
| <b>Speaker:</b> Enric Tejedor Saavedra (CERN)  |   |   |
|  SWAN_IMLmeeting...   |   |   |
| <b>16:35</b>   | → 17:00 <b>(kernel) density estimation</b>  |  25m  |
| <b>Speaker:</b> Anton Poluektov (University of Warwick (GB))   |   |   |