

**Workshop on data analysis in
large-scale research:
comparing experiences in
physics and biology**



Report of Contributions

Contribution ID: 1

Type: **not specified**

Welcome

Wednesday, December 6, 2017 9:00 AM (10 minutes)

Contribution ID: 2

Type: **not specified**

CERN openlab: a Framework for Scientific Collaboration

Wednesday, December 6, 2017 9:10 AM (20 minutes)

Author: Dr DI MEGLIO, Alberto (CERN)

Presenter: Dr DI MEGLIO, Alberto (CERN)

Contribution ID: 3

Type: **not specified**

Data Platforms and System Biology: Can Health be Modeled?

Wednesday, December 6, 2017 9:30 AM (30 minutes)

Presenter: Dr SAGNER, Michael (ESPREVMED)

Contribution ID: 4

Type: **not specified**

Preserving and Reusing High-Energy Physics Data Analyses

Wednesday, December 6, 2017 10:00 AM (30 minutes)

Author: SIMKO, Tibor (CERN)

Presenter: SIMKO, Tibor (CERN)

Contribution ID: 5

Type: **not specified**

Complex Systems - Applications and Implications in BioMedicine

Wednesday, December 6, 2017 2:00 PM (30 minutes)

Presenter: Dr BAR-YAM, Yaneer (New England Complex Systems Institute)

Contribution ID: 6

Type: **not specified**

SWAN (Service for Web based ANalysis), a platform to perform interactive data analysis in the cloud

Wednesday, December 6, 2017 11:30 AM (30 minutes)

Author: CASTRO, Diogo (FCT Fundacao para a Ciencia e a Tecnologia (PT))

Presenter: CASTRO, Diogo (FCT Fundacao para a Ciencia e a Tecnologia (PT))

Contribution ID: 7

Type: **not specified**

Discussion on a possible action plan to define and build a distributed health baseline and how CERN can contribute

Wednesday, December 6, 2017 2:30 PM (1h 30m)

- 1) Round table of expressions of interests and objectives
- 2) Identifications of differences, similarities, shared goals
- 3) Identification of common actions in support of shared goals

Contribution ID: 8

Type: **not specified**

Conclusions and Next Steps

Wednesday, December 6, 2017 4:00 PM (30 minutes)

Contribution ID: 9

Type: **not specified**

Systems science for medicine; Synergy at the boundary between biology and physics

Wednesday, December 6, 2017 11:00 AM (30 minutes)

Medicine remains a qualitative discipline because we have not yet understood the fundamental physics governing biological systems. Current approaches have made huge headway, but lack cohesive frameworks capable of indexing and integrating detailed findings into quantitative frameworks assisting the promotion of health.

In this lecture, I describe potential short-, intermediate-, and long-term projects, ending with a discussion of my current work on the biophysics of brain function.

Presenter: Dr GOLDMAN, Jennifer Sarah (European Institute for Theoretical Neuroscience (EITN))