

Kick-off meeting Spoke 2 Centro HPC

Report of Contributions

Contribution ID: 1

Type: **not specified**

Intro Spoke 2 e recap della situazione

Thursday, 13 October 2022 10:00 (1 hour)

Presenters: STAMERRA, Antonio (INFN-Roma and INAF-OAR); MALVEZZI, Sandra (Istituto Nazionale di Fisica Nucleare); BOCCALI, Tommaso (Istituto Nazionale di Fisica Nucleare)

Contribution ID: 2

Type: **not specified**

Discussione

Thursday, 13 October 2022 11:00 (1 hour)

Contribution ID: 3

Type: **not specified**

Aspetti Amministrativi

Thursday, 13 October 2022 12:00 (30 minutes)

Presenters: STAMERRA, Antonio (INFN-Roma and INAF-OAR); MALVEZZI, Sandra (Istituto Nazionale di Fisica Nucleare); BOCCALI, Tommaso (Istituto Nazionale di Fisica Nucleare)

Contribution ID: 4

Type: **not specified**

Discussione

Thursday, 13 October 2022 14:30 (30 minutes)

Contribution ID: 11

Type: **not specified**

WP1: recap piani e stato

Friday, 14 October 2022 10:00 (15 minutes)

Presenters: COSMAI, Leonardo (Istituto Nazionale di Fisica Nucleare); GIUSTI, Leonardo (Istituto Nazionale di Fisica Nucleare)

Contribution ID: 12

Type: **not specified**

WP2: recap piani e stato

Friday, 14 October 2022 10:15 (15 minutes)

Presenters: LENZI, Piergiulio (Istituto Nazionale di Fisica Nucleare); VAGNONI, Vincenzo Maria (Istituto Nazionale di Fisica Nucleare)

Contribution ID: 13

Type: **not specified**

WP3: recap piani e stato

Friday, 14 October 2022 10:30 (15 minutes)

Presenters: LANDONI, Marco (INAF - Istituto Nazionale di Astrofisica); NATOLI, Paolo (Istituto Nazionale di Fisica Nucleare)

Contribution ID: 14

Type: **not specified**

WP4: recap piani e stato

Friday, 14 October 2022 11:15 (15 minutes)

Presenters: POMPILI, Alexis (Istituto Nazionale di Fisica Nucleare); GENNAI, Simone (MIB); GENNAI, Simone (Istituto Nazionale di Fisica Nucleare)

Contribution ID: 15

Type: **not specified**

WP5: recap piani e stato

Friday, 14 October 2022 11:30 (15 minutes)

Presenters: SPIGA, Daniele (Istituto Nazionale di Fisica Nucleare); ROSSI, Elvira (Istituto Nazionale di Fisica Nucleare)

Contribution ID: 16

Type: **not specified**

WP6: recap piani e stato

Friday, 14 October 2022 11:45 (15 minutes)

Presenters: TRICOMI, Alessia Rita (Istituto Nazionale di Fisica Nucleare); VISCONTI, francesco (INAF)

Contribution ID: 17

Type: **not specified**

Discussione e Wrap-up

Friday, 14 October 2022 12:00 (1 hour)

Contribution ID: **18**

Type: **not specified**

Data reduction workflows and statistical interpretation

Thursday, 13 October 2022 15:15 (20 minutes)

Presenters: SPIGA, Daniele (Istituto Nazionale di Fisica Nucleare); CIANGOTTINI, Diego (INFN Perugia)

Session Classification: Parallel WP2

Contribution ID: 19

Type: **not specified**

ML based fast simulation

Thursday, 13 October 2022 15:35 (20 minutes)

Presenter: ANDERLINI, Lucio (Istituto Nazionale di Fisica Nucleare)

Session Classification: Parallel WP2

Contribution ID: 20

Type: **not specified**

ML based event classification techniques

Thursday, 13 October 2022 15:55 (30 minutes)

Presenters: ROSSI, Elvira (Istituto Nazionale di Fisica Nucleare); MEONI, Evelin (Istituto Nazionale di Fisica Nucleare)

Session Classification: Parallel WP2

Contribution ID: 21

Type: **not specified**

ML based event reconstruction techniques

Thursday, 13 October 2022 16:25 (30 minutes)

Presenters: MARTINELLI, Maurizio (Università degli Studi di Milano Bicocca e INFN); DE FILIPPIS, Nicola (BA)

Session Classification: Parallel WP2

Contribution ID: 23

Type: **not specified**

Cross domain initiatives (with appeal for industry)

Thursday, 13 October 2022 16:55 (20 minutes)

Presenters: GENNAI, Simone (MIB); GENNAI, Simone (Istituto Nazionale di Fisica Nucleare)

Session Classification: Parallel WP2

Contribution ID: 24

Type: **not specified**

Condensed matter and low dimensional systems

Thursday, 13 October 2022 15:00 (20 minutes)

Presenter: GIULIANO, Domenico (Istituto Nazionale di Fisica Nucleare)

Session Classification: Parallel WP1

Contribution ID: 25

Type: **not specified**

Lattice field theory

Thursday, 13 October 2022 15:20 (20 minutes)

Presenter: COSMAI, Leonardo (Istituto Nazionale di Fisica Nucleare)

Session Classification: Parallel WP1

Contribution ID: 26

Type: **not specified**

Collider physics phenomenology

Thursday, 13 October 2022 15:40 (20 minutes)

Presenter: MASTROLIA, Pierpaolo (Istituto Nazionale di Fisica Nucleare)

Session Classification: Parallel WP1

Contribution ID: 27

Type: **not specified**

Gravitational waves, cosmology and astroparticle physics

Thursday, 13 October 2022 16:00 (20 minutes)

Presenter: GIACOMAZZO, Bruno (Milano-Bicocca)

Session Classification: Parallel WP1

Contribution ID: 28

Type: **not specified**

High energy nuclear physics

Thursday, 13 October 2022 16:40 (20 minutes)

Presenter: BECATTINI, Francesco (Istituto Nazionale di Fisica Nucleare)

Session Classification: Parallel WP1

Contribution ID: 29

Type: **not specified**

Physics of complex systems

Thursday, 13 October 2022 16:20 (20 minutes)

Presenter: SUMA, Antonio

Session Classification: Parallel WP1

Contribution ID: **30**

Type: **not specified**

Discussion (All)

Thursday, 13 October 2022 17:00 (30 minutes)

Presenters: COSMAI, Leonardo (Istituto Nazionale di Fisica Nucleare); GIUSTI, Leonardo (Istituto Nazionale di Fisica Nucleare)

Session Classification: Parallel WP1

Contribution ID: **31**

Type: **not specified**

ML_INFN: cosa possiamo imparare ?

Thursday, 13 October 2022 18:35 (20 minutes)

Presenter: ANDERLINI, Lucio (Istituto Nazionale di Fisica Nucleare)

Session Classification: Parallel WP4

Contribution ID: 32

Type: **not specified**

FPGAs array per fast track reconstruction at trigger level

Thursday, 13 October 2022 18:15 (20 minutes)

Presenter: PUNZI, Giovanni (Istituto Nazionale di Fisica Nucleare)

Session Classification: Parallel WP4

Contribution ID: 33

Type: **not specified**

Porting to GPU, experience from Experimental-HEP

Thursday, 13 October 2022 17:35 (20 minutes)

Presenter: Dr DI PILATO, Tony

Session Classification: Parallel WP4

Contribution ID: 34

Type: **not specified**

Porting to GPU, experience from Theory-HEP

Thursday, 13 October 2022 17:55 (20 minutes)

Presenter: SANFILIPPO, Francesco (Istituto Nazionale di Fisica Nucleare)

Session Classification: Parallel WP4

Contribution ID: 35

Type: **not specified**

WP5: Introduction and status

Thursday, 13 October 2022 17:30 (30 minutes)

Presenters: SPIGA, Daniele (Istituto Nazionale di Fisica Nucleare); ROSSI, Elvira (Istituto Nazionale di Fisica Nucleare)

Session Classification: Parallel WP5

Contribution ID: 36

Type: **not specified**

WP1: Use cases/Requirements and summary of WP1 parallel

Thursday, 13 October 2022 18:00 (15 minutes)

Presenter: BRUNO, Mattia

Session Classification: Parallel WP5

Contribution ID: 37

Type: **not specified**

WP2: Use cases/Requirements and summary of WP2 parallel

Thursday, 13 October 2022 18:15 (15 minutes)

Presenter: LENZI, Piergiulio (Istituto Nazionale di Fisica Nucleare)

Session Classification: Parallel WP5

Contribution ID: 38

Type: **not specified**

WP3: Use cases/Requirements and summary of WP3 parallel

Thursday, 13 October 2022 18:30 (15 minutes)

Presenters: LANDOLFI, Marco; NATOLI, Paolo

Session Classification: Parallel WP5

Kick-off meeting... / Report of Contributions

IFAB

Contribution ID: 39

Type: **not specified**

IFAB

Friday, 14 October 2022 09:00 (20 minutes)

Presenter: BECCA, Marco

Session Classification: Partner Industriali

Contribution ID: 40

Type: **not specified**

Leonardo Finmeccanica

Friday, 14 October 2022 09:20 (20 minutes)

Presenters: CAROLINA, Berucci; CARLO , Cavazzoni

Session Classification: Partner Industriali

Contribution ID: 41

Type: **not specified**

Discussione

Thursday, 13 October 2022 12:30 (30 minutes)

Contribution ID: 42

Type: **not specified**

Context and goals of the session

Thursday, 13 October 2022 15:00 (5 minutes)

Presenters: LANDONI, Marco (INAF - Istituto Nazionale di Astrofisica); NATOLI, Paolo (Istituto Nazionale di Fisica Nucleare)

Session Classification: Parallel WP3

Contribution ID: 43

Type: **not specified**

INAF activities in WP3 and use cases

Thursday, 13 October 2022 15:05 (20 minutes)

Presenter: STAMERRA, Antonio (INFN-Roma and INAF-OAR)

Session Classification: Parallel WP3

Contribution ID: 44

Type: **not specified**

HPC case studies for the CMB

Thursday, 13 October 2022 15:25 (15 minutes)

Presenter: PAGANO, Luca (Istituto Nazionale di Fisica Nucleare)

Session Classification: Parallel WP3

Contribution ID: 45

Type: **not specified**

Turbulence everywhere: Atmosphere, Heliosphere, Cosmos

Thursday, 13 October 2022 15:40 (20 minutes)

Presenter: PRIMAVERA, Leonardo (UniCal)

Session Classification: Parallel WP3

Contribution ID: 46

Type: **not specified**

Machine learning techniques for multimessenger and multiwavelength astrophysics

Thursday, 13 October 2022 16:00 (15 minutes)

Presenters: BISSALDI, Elisabetta (Istituto Nazionale di Fisica Nucleare); RAINO', Silvia (Istituto Nazionale di Fisica Nucleare)

Session Classification: Parallel WP3

Contribution ID: 47

Type: **not specified**

Landscape and computational challenges for the LISA global fit

Thursday, 13 October 2022 16:15 (15 minutes)

Presenter: BUSCICCHIO, Riccardo (UniMiB)

Session Classification: Parallel WP3

Contribution ID: 48

Type: **not specified**

HPC studies applied to astroparticle/astrophysics and gw theory

Thursday, 13 October 2022 17:10 (15 minutes)

Presenter: NUCITA, Achille (Istituto Nazionale di Fisica Nucleare)

Session Classification: Parallel WP3

Contribution ID: 49

Type: **not specified**

ML based PID (astroparticles) and GW signal detection

Thursday, 13 October 2022 16:50 (20 minutes)

Presenter: LENTI, Massimo (Istituto Nazionale di Fisica Nucleare)

Session Classification: Parallel WP3

Contribution ID: 50

Type: **not specified**

New physics from n-point correlations of large-scale structure, gravitational waves and the cosmic microwave background

Thursday, 13 October 2022 17:25 (15 minutes)

Presenter: RACCANELLI, Alvisè (CERN)

Session Classification: Parallel WP3

Contribution ID: 51

Type: **not specified**

WP6: introduction and first ideas

Thursday, 13 October 2022 17:30 (20 minutes)

Presenters: TRICOMI, Alessia Rita (Istituto Nazionale di Fisica Nucleare); VISCONTI, Francesco

Session Classification: Parallel WP6

Contribution ID: 52

Type: **not specified**

Use cases from ARPAE

Thursday, 13 October 2022 17:50 (15 minutes)

Presenter: STORTINI, Michele (ARPA Emilia Romagna)

Session Classification: Parallel WP6

Contribution ID: 53

Type: **not specified**

Use cases from ISPRA

Thursday, 13 October 2022 18:05 (15 minutes)

Presenter: MARIANI, Stefano (ISPRA)

Session Classification: Parallel WP6

Contribution ID: 54

Type: **not specified**

Image reconstruction algorithm

Thursday, 13 October 2022 18:20 (15 minutes)

Presenter: TRAMONTANA, Emiliano (Università di Catania)

Session Classification: Parallel WP6

Contribution ID: 55

Type: **not specified**

General discussion

Thursday, 13 October 2022 18:35 (20 minutes)

Presenter: ALL

Session Classification: Parallel WP6

Contribution ID: 56

Type: **not specified**

Computing and analysis for gravitational wave searches with LIGO/Virgo/KAGRA data

Thursday, 13 October 2022 16:30 (10 minutes)

Presenter: PALOMBA, Cristiano (Istituto Nazionale di Fisica Nucleare)

Session Classification: Parallel WP3

Contribution ID: 57

Type: **not specified**

Transient GW signals without templates

Thursday, 13 October 2022 16:40 (10 minutes)

Presenter: MILOTTI, Edoardo (Istituto Nazionale di Fisica Nucleare)

Session Classification: Parallel WP3

Contribution ID: 58

Type: **not specified**

Impostazione del lavoro

Thursday, 13 October 2022 15:00 (15 minutes)

Presenters: LENZI, Piergiulio (Istituto Nazionale di Fisica Nucleare); VAGNONI, Vincenzo Maria (Istituto Nazionale di Fisica Nucleare)

Session Classification: Parallel WP2

Contribution ID: 59

Type: **not specified**

News

Thursday, 13 October 2022 17:30 (1 minute)

Session Classification: Parallel WP4

Contribution ID: **60**

Type: **not specified**

CYGNO a large TPC for dark matter and neutrino study

Thursday, 13 October 2022 17:40 (10 minutes)

Presenter: MAZZITELLI, Giovanni (Istituto Nazionale di Fisica Nucleare)

Session Classification: Parallel WP3