

Annual meeting January 2020

Report of Contributions

Contribution ID: 1

Type: **not specified**

Welcome and project summary

Monday, 3 February 2020 09:30 (15 minutes)

Presenter: RETICO, Alessandra (PI)

Contribution ID: 2

Type: **not specified**

Uncovering the causes of site signature in MRI features of multicenter data

Monday, 3 February 2020 09:45 (15 minutes)

Presenter: BOSCO, Paolo (INFN - Pisa)

Session Classification: AIM 1: Data harmonization

Contribution ID: 3

Type: **not specified**

An attempt to account for site effects in multicenter MRI data analysis with ML

Monday, 3 February 2020 10:00 (15 minutes)

Presenter: LARUINA, Francesco (P)

Session Classification: AIM 1: Data harmonization

Contribution ID: 4

Type: **not specified**

Data harmonization in mammography: the tissue equivalent representation

Monday, 3 February 2020 10:15 (15 minutes)

Presenter: OLIVA, Piernicola (University of Sassari and INFN Cagliari)

Session Classification: AIM 1: Data harmonization

Contribution ID: **10**

Type: **not specified**

Status of the DORIAN initiative

Monday, 3 February 2020 10:45 (15 minutes)

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

Session Classification: AIM 2: Quantification

Contribution ID: **11**

Type: **not specified**

Update on amyloid PET: quantification, classification and clinics

Monday, 3 February 2020 11:30 (15 minutes)

Presenter: PEIRA, Enrico (Istituto Nazionale di Fisica Nucleare)

Session Classification: AIM 2: Quantification

Contribution ID: 12

Type: **not specified**

Quality, harmonization and parcellation

Monday, 3 February 2020 10:30 (15 minutes)

Presenter: ALCHERA, Nicola (Istituto Nazionale di Fisica Nucleare)

Session Classification: AIM 1: Data harmonization

Contribution ID: 13

Type: **not specified**

BYRON: a Deep Learning library for advanced Machine Learning

Monday, 3 February 2020 11:45 (15 minutes)

Presenter: CURTI, Nico

Session Classification: AIM 2: Quantification

Contribution ID: 14

Type: **not specified**

Deep Learning implementation of MRF data reconstruction

Monday, 3 February 2020 12:00 (15 minutes)

Presenter: PERETTI, Luca

Session Classification: AIM 2: Quantification

Contribution ID: 15

Type: **not specified**

Advancements in QSM data analysis

Monday, 3 February 2020 12:15 (15 minutes)

Presenter: TESTA, Claudia

Session Classification: AIM 2: Quantification

Contribution ID: 16

Type: **not specified**

Collection of the dataset for Radiomic and Dosiomic analysis in RT

Monday, 3 February 2020 12:30 (15 minutes)

Presenter: PIFFER, Stefano (Istituto Nazionale di Fisica Nucleare)

Session Classification: AIM 3: Predictive models

Contribution ID: 17

Type: **not specified**

Preliminary classification results on data from Lung RT

Monday, 3 February 2020 12:45 (15 minutes)

Presenter: MARRALE, Maurizio (CT)

Session Classification: AIM 3: Predictive models

Contribution ID: **18**

Type: **not specified**

Challenges in ML analysis implementation on RT data

Monday, 3 February 2020 13:00 (15 minutes)

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

Session Classification: AIM 3: Predictive models

Contribution ID: **19**

Type: **not specified**

Update on predictive models for CESM data

Monday, 3 February 2020 13:15 (15 minutes)

Presenter: TANGARO, Sabina (BA)

Session Classification: AIM 3: Predictive models

Contribution ID: 20

Type: **not specified**

Thalamic parcellation through probabilistic tractography for tcMRgFUS treatments. Preliminary results of fMRI analyses on TcMRgFUS patients

Monday, 3 February 2020 14:15 (15 minutes)

Presenters: REMONDINI, Daniel (Istituto Nazionale di Fisica Nucleare); COLLURA, Giorgio (CT); MAR-
RALE, Maurizio (CT)

Session Classification: AIM 3: Predictive models

Contribution ID: 21

Type: **not specified**

CHIMERA: a network of networks in medicine

Monday, 3 February 2020 14:30 (15 minutes)

Presenter: REMONDINI, Daniel (Istituto Nazionale di Fisica Nucleare)

Session Classification: AIM 3: Predictive models

Contribution ID: 22

Type: **not specified**

Predictive models for tumor classification

Monday, 3 February 2020 14:45 (15 minutes)

Presenters: MENGUCCI, Carlo; REMONDINI, Daniel (Istituto Nazionale di Fisica Nucleare); MAR-
RALE, Maurizio (CT)

Session Classification: AIM 3: Predictive models

Contribution ID: 23

Type: **not specified**

Explaining Explanation Methods: Overview and Applications

Monday, 3 February 2020 15:00 (30 minutes)

Presenter: GUIDOTTI, Riccardo

Session Classification: Hot Topics in ML: Explainability and Interpretability of ML models

Contribution ID: 24

Type: **not specified**

Explainable ML Framework for Multi-site Harmonization

Monday, 3 February 2020 15:30 (20 minutes)

Presenter: LOMBARDI, Angela (Istituto Nazionale di Fisica Nucleare)

Session Classification: Hot Topics in ML: Explainability and Interpretability of ML models

Contribution ID: 25

Type: **not specified**

Explainable ML in mammography

Monday, 3 February 2020 15:50 (20 minutes)

Presenters: SCAPICCHIO, Camilla; LIZZI, Francesca (Istituto Nazionale di Fisica Nucleare)

Session Classification: Hot Topics in ML: Explainability and Interpretability of ML models

Contribution ID: 26

Type: **not specified**

Discussion, General Remarks and Conclusions

Monday, 3 February 2020 16:10 (50 minutes)

Presenter: RETICO, Alessandra (PI)