# Dynamical complexity in astrophysical contexts

#### **Report of Contributions**

Contribution ID: 1 Type: not specified

#### Welcome, Introduction, logistic

Monday 6 February 2023 09:00 (20 minutes)

Presenter: Dr FIORE, Fabrizio (Istituto Nazionale di Astrofisica (INAF))

Contribution ID: 2 Type: not specified

#### Solar flares, Coronal Mass Ejections

Monday 6 February 2023 09:30 (1 hour)

**Presenter:** Dr IVANOVSKI, Stavro (INAF-OATs)

Contribution ID: 4 Type: **not specified** 

### Self-organized criticality with application to solar flares

Monday 6 February 2023 10:50 (1 hour)

**Presenter:** Dr HERRMANN, Hans (Universidade Federal do Ceara)

Contribution ID: 5 Type: **not specified** 

#### **Chaotic Cold Accretion onto Black Holes**

Tuesday 7 February 2023 09:30 (1 hour)

**Presenter:** Dr GASPARI, Max (University of Princeton)

Contribution ID: 6 Type: **not specified** 

### Crackling noise- Statistical physics of avalanche phenomena

Tuesday 7 February 2023 10:30 (1 hour)

Presenter: Prof. ZAPPERI, Stefano (Universita' di Milano)

Contribution ID: 7 Type: **not specified** 

#### Multiphase gas in central cluster and group galaxies

Tuesday 7 February 2023 11:50 (1 hour)

**Presenter:** Dr OLIVERES, Valeria (University of Kentuky)

Contribution ID: 8 Type: not specified

### N-body chaos, discreteness effects and collective instabilities in self-gravitating systems

Tuesday 7 February 2023 14:20 (1 hour)

**Presenter:** Dr DI CINTIO, Pierfrancesco (CNR-ISC)

Contribution ID: 9 Type: not specified

### AGN feedback in galaxy clusters and groups: state-of-the-art and recent advances

Wednesday 8 February 2023 09:30 (1 hour)

**Presenter:** Dr PASINI, Thomas (Hamburg University)

Contribution ID: 10 Type: not specified

#### Formation and evolution of galaxy cluster Bright Central Galaxies

Wednesday 8 February 2023 10:30 (1 hour)

**Presenter:** Dr TOZZI, Paolo (INAF-OAA)

Contribution ID: 11 Type: not specified

### Classical systems with long-range interactions in equilibrium and out of equilibrium

Wednesday 8 February 2023 11:50 (1 hour)

**Presenter:** CASETTI, Lapo (Universita' di Firenze)

Contribution ID: 12 Type: not specified

#### **Quantum Long-range systems**

Wednesday 8 February 2023 14:20 (1 hour)

Presenter: Dr DEFENU, Nicolo' (ETH)

Contribution ID: 13 Type: not specified

#### Dynamical complexity in micro-scale disk-wind systems

Thursday 9 February 2023 09:30 (1 hour)

**Presenter:** Dr FIORE, Fabrizio (Istituto Nazionale di Astrofisica (INAF))

Contribution ID: 14 Type: not specified

#### Star formation and black hole accretion histories in galaxy evolution models

Thursday 9 February 2023 10:30 (1 hour)

**Presenter:** Dr FONTANOT, Fabio (INAF-OATs)

Contribution ID: 15 Type: not specified

## Spatio-Temporal correlations in earthquakes and solar flares: self-organized criticality beyond the sand pile model

Thursday 9 February 2023 11:50 (1 hour)

Presenter: Prof. LIPPIELLO, Eugenio (Universita' della Campania)

Contribution ID: 16 Type: not specified

### Theory and observations of photoionised gas around supermassive black holes

Friday 10 February 2023 09:30 (1 hour)

**Presenter:** Dr LUMINARI, Alfredo (INAF-IAPS)

Contribution ID: 17 Type: not specified

#### Gamma Ray Bursts

Friday 10 February 2023 10:30 (40 minutes)

Presenter: Dr FIORE, Fabrizio (Istituto Nazionale di Astrofisica (INAF))

Contribution ID: 18 Type: not specified

### Large deviations: their use in equilibrium statistical mechanics and in a broader perspective.

Monday 6 February 2023 14:20 (1 hour)

Presenter: Prof. RUFFO, Stefano (SISSA)

Contribution ID: 20 Type: not specified

#### Systems out-of-equilibrium: fluctuation relations.

Thursday 9 February 2023 14:20 (1 hour)

Presenter: Prof. RUFFO, Stefano (SISSA)