

# **LISA Consortium #3**

## **Report of Contributions**

Contribution ID: 1

Type: **not specified**

## Consortium status

*Monday, 5 November 2018 09:10 (20 minutes)*

**Presenter:** DANZMANN, Karsten (AEI Hannover)

**Session Classification:** Status

Contribution ID: 2

Type: **not specified**

## ESA status

*Monday, 5 November 2018 09:30 (30 minutes)*

**Presenter:** GEHLER, Martin (ESTEC)

**Session Classification:** Status

Contribution ID: **3**

Type: **not specified**

## **Instrument status**

*Monday, 5 November 2018 10:00 (20 minutes)*

**Presenter:** HEWITSON, Martin (AEI Hannover)

**Session Classification:** Status

Contribution ID: 4

Type: **not specified**

## Welcome

*Monday, 5 November 2018 09:00 (10 minutes)*

**Presenters:** PRIETO, Eric (LAM); DANZMANN, Karsten (AEI Hannover)

Contribution ID: 5

Type: **not specified**

## **Final discussion and conclusions**

*Wednesday, 7 November 2018 14:15 (1 hour)*

**Presenter:** DANZMANN, Karsten (AEI Hannover)

Contribution ID: 6

Type: **not specified**

## **Coordination group report**

*Monday, 5 November 2018 10:50 (20 minutes)*

**Presenter:** HEWITSON, Martin (AEI Hannover)

**Session Classification:** Group reports

Contribution ID: 7

Type: **not specified**

## **Presentation and Publication Committee report**

*Monday, 5 November 2018 11:10 (20 minutes)*

**Presenter:** Dr CHRISTENSEN, Nelson (Artemis, Observatoire de la Cote Azur)

**Session Classification:** Group reports



Contribution ID: 8

Type: **not specified**

## **Publication & Outreach report**

*Monday, 5 November 2018 11:30 (20 minutes)*

**Presenter:** HOLLEY-BOCKELMANN , Kelly (Vanderbilt University)

**Session Classification:** Group reports

Contribution ID: 9

Type: **not specified**

## **Diversity and Inclusion**

*Monday, 5 November 2018 11:50 (1 hour)*

**Presenters:** ROSSI, Elena Maria (Leiden Observatory); PETRINI, Michaela (LPTHE)

Contribution ID: **10**

Type: **not specified**

## **NASA Status**

*Monday, 5 November 2018 14:10 (20 minutes)*

**Presenter:** THORPE, Ira (NASA GSFC)

**Session Classification:** Status

Contribution ID: 11

Type: **not specified**

## **Decadal survey: white paper status**

*Monday, 5 November 2018 14:30 (20 minutes)*

**Presenter:** HOLLEY-BOCKELMANN , Kelly (Vanderbilt University)

**Session Classification:** Status

Contribution ID: 12

Type: **not specified**

## Cosmology Working Group Report

*Monday, 5 November 2018 15:10 (20 minutes)*

**Presenters:** CAPRINI, Chiara (APC); NARDINI, Germano (University of Stavanger); CALDWELL, Robert (Dartmouth University)

**Session Classification:** Group reports

Contribution ID: 13

Type: **not specified**

## Fundamental Physics Working Group Report

*Monday, 5 November 2018 15:30 (5 minutes)*

**Presenters:** YUNES, Nico (Montana State University); JETZER, Philippe (Physik Institut, University of Zurich); HERTOOG, Thomas (KU Leuven)

**Session Classification:** Group reports

Contribution ID: 14

Type: **not specified**

## **Astrophysics Working Group Report**

*Monday, 5 November 2018 15:35 (20 minutes)*

**Presenters:** NELEMANS, Gijs (Radboud University Nijmegen); MAYER, Lucio (University of Zurich); VOLONTERI, Marta (IAP); LARSON, Shane (Northwestern University)

**Session Classification:** Group reports

Contribution ID: 15

Type: **not specified**

## **GRACE Follow-On**

*Monday, 5 November 2018 16:35 (30 minutes)*

**Presenter:** HEINZEL, Gerhard (AEI)

**Session Classification:** Highlight Talks



Contribution ID: 16

Type: **not specified**

## The Joint Role of LISA and the Electromagnetic Sector

*Monday, 5 November 2018 17:05 (30 minutes)*

LISA will pin down the merger rate of massive black hole binaries (MBHBs) with mass less than 10 million solar masses. But what happens in the life of a MBHB before it enters the LISA band? Wrapped up in this question is uncertain gas physics and many-body gravitational dynamics acting at the centers of galactic nuclei where MBHBs form and merge. This intriguing part of MBHB evolution, at the sub-parsec separation scale, can be directly probed via EM signatures of MBHBs. I will discuss a few promising EM signatures and techniques for identifying MBHBs at sub-parsec orbital separations. EM identification could provide predictions for the LISA merger rate before LISA flies. But, importantly, even after LISA flies, EM identification would serve as a pillar of a new field of MBHB demography, complimentary to GW detection, allowing us to maximize our understanding of MBHBs and their astrophysical environments.

**Presenter:** D'ORAZIO, Daniel (Harvard University)

**Session Classification:** Highlight Talks

Contribution ID: 17

Type: **not specified**

**TBD**

**Session Classification:** Highlight Talks

Contribution ID: 18

Type: **not specified**

## **Last development in the predictions of phase transition spectrum**

*Wednesday, 7 November 2018 09:00 (25 minutes)*

**Presenter:** RUMMUKAINEN, Kavi (Department of Physics and Helsinki Institute of Physics )

**Session Classification:** Highlight Talks

Contribution ID: 19

Type: **not specified**

## **Cosmology and modified gravity with LISA standard sirens**

*Wednesday, 7 November 2018 09:25 (25 minutes)*

**Presenter:** TAMANINI, Nicola (AEI Potsdam)

**Session Classification:** Highlight Talks

Contribution ID: 20

Type: **not specified**

## **Ultracompact binaries with LISA**

*Wednesday, 7 November 2018 09:50 (25 minutes)*

**Presenter:** LAMBERTS, Astrid (OCA)

**Session Classification:** Highlight Talks

Contribution ID: 21

Type: **not specified**

## **LISA Science Group Report**

*Wednesday, 7 November 2018 10:15 (20 minutes)*

**Presenter:** Dr VALLISNERI, Michele (Jet Propulsion Laboratory)

**Session Classification:** Group reports

Contribution ID: 22

Type: **not specified**

## **LISA Data Processing Group Report**

*Wednesday, 7 November 2018 11:45 (20 minutes)*

**Presenters:** PETITEAU, Antoine (APC - Université Paris-Diderot); NGUYEN, Hong-Nga, Anne-Thérèse (CNES)

**Session Classification:** Group reports

Contribution ID: 23

Type: **not specified**

## **LISA Science Group Report**

**Session Classification:** Group reports



Contribution ID: 24

Type: **not specified**

## Simulation Working Group Report

*Wednesday, 7 November 2018 12:05 (20 minutes)*

**Presenters:** Dr VETRUGNO, Daniele (University of Trento ); FERRAIOLI, Luigi (ETH Zurich); MARTINO, joseph (APC)

**Session Classification:** Group reports

Contribution ID: 25

Type: **not specified**

## **LISA Data Challenge Report**

*Wednesday, 7 November 2018 12:25 (20 minutes)*

**Presenters:** Dr VALLISNERI, Michele (Jet Propulsion Laboratory); BABAK, Stanislav (APC)

**Session Classification:** Group reports

Contribution ID: 26

Type: **not specified**

## **LIG: Stray Light Working Group Report**

*Wednesday, 7 November 2018 11:25 (20 minutes)*

**Presenters:** WANNER, Gudrun (AEI); LINTZ, Michel (ARTEMIS / OCA)

**Session Classification:** Group reports

Contribution ID: 27

Type: **not specified**

## Waveform Working Group Report

*Wednesday, 7 November 2018 12:45 (20 minutes)*

**Presenters:** SHOEMAKER, Deidre (Georgia Tech ); WITEK, Helvi (King's College London ); VAN DE MEENT , Maarten (AEI Potsdam); WARBURTON, Niels (University College Dublin )

**Session Classification:** Group reports

Contribution ID: 28

Type: **not specified**

## **LISA Instrument Group Report**

*Wednesday, 7 November 2018 11:05 (20 minutes)*

**Presenters:** HEWITSON, Martin (AEI Hannover); Dr WEBER, William (Università di Trento / TIFPA )

**Session Classification:** Group reports

Contribution ID: 29

Type: **not specified**

## Waveform Working Group Annoucment

*Monday, 5 November 2018 15:55 (10 minutes)*

**Presenters:** SHOEMAKER, Deidre (Georgia Tech ); WITEK, Helvi (King's College London ); VAN DE MEENT , Maarten (AEI Potsdam); WARBURTON, Niels (University College Dublin )

**Session Classification:** Group reports

Contribution ID: **30**

Type: **not specified**

## **Discussion US Status**

*Monday, 5 November 2018 14:50 (20 minutes)*

**Presenters:** THORPE, Ira (NASA GSFC); HOLLEY-BOCKELMANN , Kelly (Vanderbilt University)

**Session Classification:** Status