

# **DTP/TALENT 2024 | Nuclear Theory for Astrophysics**

## **Report of Contributions**

Contribution ID: 1

Type: **not specified**

## General Introduction

*Monday, 15 July 2024 09:30 (1h 30m)*

**Presenter:** PIEKAREWICZ, Jorge (Florida State University)

Contribution ID: 2

Type: **not specified**

## **General introduction**

*Monday, 15 July 2024 11:30 (1 hour)*

**Presenter:** PIEKAREWICZ, Jorge (Florida State University)

Contribution ID: 3

Type: **not specified**

## **CompOSE. Tables for state of the art equations of state**

*Monday, 15 July 2024 14:00 (3 hours)*

**Presenter:** RADUTA, Adriana R. (IFIN-HH, Bucharest)

Contribution ID: 4

Type: **not specified**

## Introduction to the Equation of State

*Tuesday, 16 July 2024 09:30 (1h 30m)*

**Presenter:** PIEKAREWICZ, Jorge (Florida State University)

Contribution ID: 5

Type: **not specified**

## **A simple example: White Dwarf Stars**

*Tuesday, 16 July 2024 11:30 (1 hour)*

**Presenter:** PIEKAREWICZ, Jorge (Florida State University)

Contribution ID: 6

Type: **not specified**

## **NICER:past, present and future in constraining the EOS from EM observations**

*Tuesday, 16 July 2024 14:00 (3 hours)*

**Presenter:** Dr VINCIGUERRA, Serena (University of Amsterdam)

Contribution ID: 7

Type: **not specified**

## **Nuclear Physics 101 - The liquid drop model**

*Wednesday, 17 July 2024 09:30 (1h 30m)*

**Presenter:** PIEKAREWICZ, Jorge (Florida State University)

Contribution ID: 8

Type: **not specified**

## **Everything you wanted to know about form factors**

*Wednesday, 17 July 2024 11:30 (1 hour)*

**Presenter:** PIEKAREWICZ, Jorge (Florida State University)

Contribution ID: 9

Type: **not specified**

## **PREX/MREX and laboratory constraints on the neutron skin and the symmetry energy**

*Wednesday, 17 July 2024 14:00 (3 hours)*

**Presenter:** Prof. SFIENTI, Concettina (Johannes Gutenberg-Universitaet)

Contribution ID: **10**

Type: **not specified**

# Heaven and Earth: Density functional Theory

*Thursday, 18 July 2024 09:30 (1h 30m)*

**Presenter:** PIEKAREWICZ, Jorge (Florida State University)

Contribution ID: 11

Type: **not specified**

# Heaven and Earth: Density functional Theory

*Thursday, 18 July 2024 11:30 (1 hour)*

**Presenter:** PIEKAREWICZ, Jorge (Florida State University)

Contribution ID: 12

Type: **not specified**

## **GW: past, present and future in constraining the EOS from GW detections**

*Thursday, 18 July 2024 14:00 (3 hours)*

**Presenter:** Dr PUECHER, Anna (University of Potsdam)

Contribution ID: 13

Type: **not specified**

# Bayesian Inference and Machine Learning

*Friday, 19 July 2024 09:30 (1h 30m)*

**Presenter:** PIEKAREWICZ, Jorge (Florida State University)

Contribution ID: 15

Type: **not specified**

## **Intro to core-collapse supernova (CCSN)**

*Monday, 22 July 2024 09:30 (1h 30m)*

**Presenter:** ARCONES, Almudena (TU Darmstadt and GSI)

Contribution ID: **16**

Type: **not specified**

## **Intro to CCSN**

*Monday, 22 July 2024 11:30 (1 hour)*

**Presenter:** ARCONES, Almudena (TU Darmstadt and GSI)

Contribution ID: 17

Type: **not specified**

## **Simulations: Progenitor variation**

*Monday, 22 July 2024 14:00 (3 hours)*

**Presenters:** ARCONES, Almudena (TU Darmstadt and GSI); Dr DA SILVA SCHNEIDER, André (Universidade Federal de Santa Catarina)

Contribution ID: **18**

Type: **not specified**

## **EOS in CCSN**

*Tuesday, 23 July 2024 09:30 (1h 30m)*

**Presenter:** DA SILVA SCHNEIDER, André (Universidade Federal de Santa Catarina)

Contribution ID: **19**

Type: **not specified**

## **EOS in CCSN**

*Tuesday, 23 July 2024 11:30 (1 hour)*

**Presenter:** DA SILVA SCHNEIDER, André (Universidade Federal de Santa Catarina)

Contribution ID: **20**

Type: **not specified**

## **GW from CCNS, status**

*Wednesday, 24 July 2024 11:30 (1 hour)*

**Presenter:** Dr OBERGAULINGER, Martin (University of Valencia)

Contribution ID: 21

Type: **not specified**

## **SRO code for EOS**

*Tuesday, 23 July 2024 15:00 (2 hours)*

**Presenter:** DA SILVA SCHNEIDER, André (Universidade Federal de Santa Catarina)

Contribution ID: 22

Type: **not specified**

## **MR-SN**

*Wednesday, 24 July 2024 09:30 (1h 30m)*

**Presenter:** OBERGAULINGER, Martin (University of Valencia)

Contribution ID: 23

Type: **not specified**

## Simulations: Impact of EOS

*Wednesday, 24 July 2024 14:40 (2h 20m)*

**Presenters:** ARCONES, Almudena (TU Darmstadt and GSI); DA SILVA SCHNEIDER, André (Universidade Federal de Santa Catarina)

Contribution ID: 24

Type: **not specified**

## CCSN

*Thursday, 25 July 2024 09:30 (1h 30m)*

**Presenter:** ARCONES, Almudena (TU Darmstadt and GSI)

Contribution ID: 25

Type: **not specified**

## Nucleosynthesis

*Thursday, 25 July 2024 11:30 (1 hour)*

**Presenter:** REICHERT, Moritz (Universitat de Valencia)

Contribution ID: 26

Type: **not specified**

## Network calculations with WINNET

*Thursday, 25 July 2024 14:00 (3 hours)*

**Presenter:** REICHERT, Moritz (Universitat de Valencia)

Contribution ID: 27

Type: **not specified**

## Supernova neutrinos

*Friday, 26 July 2024 09:30 (1h 30m)*

**Presenter:** Dr CAPOZZI, Francesco (Università degli Studi dell'Aquila)

Contribution ID: 28

Type: **not specified**

## Supernova neutrinos

*Friday, 26 July 2024 11:30 (1 hour)*

**Presenter:** CAPOZZI, Francesco (Università degli Studi dell'Aquila)

Contribution ID: 29

Type: **not specified**

## Intro to Numerical Relativity

*Monday, 29 July 2024 09:30 (1h 30m)*

**Presenter:** GIACOMAZZO, Bruno (University of Milano)

Contribution ID: **30**

Type: **not specified**

## **Intro to Numerical Relativity**

*Monday, 29 July 2024 11:30 (1 hour)*

**Presenter:** GIACOMAZZO, Bruno (University of Milano)

Contribution ID: **31**

Type: **not specified**

## **LORENE Tutorial**

*Monday, 29 July 2024 15:00 (2 hours)*

**Presenter:** GIACOMAZZO, Bruno (University of Milano)

Contribution ID: 32

Type: **not specified**

## Intro to Numerical Relativity

*Tuesday, 30 July 2024 09:30 (1h 30m)*

**Presenter:** GIACOMAZZO, Bruno (University of Milano)

Contribution ID: 33

Type: **not specified**

## Intro to Numerical Relativity

*Tuesday, 30 July 2024 11:30 (1 hour)*

**Presenter:** GIACOMAZZO, Bruno (University of Milano)

Contribution ID: **34**

Type: **not specified**

## **Einstein Toolkit Tutorial**

*Tuesday, 30 July 2024 14:40 (2h 20m)*

**Presenter:** GIACOMAZZO, Bruno (University of Milano)

Contribution ID: 35

Type: **not specified**

## NS-NS Simulations

*Wednesday, 31 July 2024 09:30 (1h 30m)*

**Presenter:** GIACOMAZZO, Bruno (University of Milano)

Contribution ID: **36**

Type: **not specified**

## **The CORE database**

*Wednesday, 31 July 2024 11:30 (1 hour)*

**Presenter:** Dr GONZALEZ, Alejandra (University of Jena)

Contribution ID: 37

Type: **not specified**

## **The CORE database tutorial**

*Wednesday, 31 July 2024 14:00 (3 hours)*

**Presenter:** GONZALEZ, Alejandra (University of Jena)

Contribution ID: **38**

Type: **not specified**

## **GRB theory - jet launching**

*Thursday, 1 August 2024 11:30 (1 hour)*

**Presenter:** Dr SALAFIA, Om Sharan (INAF)

Contribution ID: 39

Type: **not specified**

## **r-process/kilonova theory**

*Thursday, 1 August 2024 09:30 (1h 30m)*

**Presenter:** PEREGO, Albino (University of Trento, Italy)

Contribution ID: 40

Type: **not specified**

## **Tutorial on r-process from simulations**

*Thursday, 1 August 2024 14:00 (3 hours)*

**Presenter:** PEREGO, Albino (University of Trento, Italy)

Contribution ID: 41

Type: **not specified**

## EM observations from NS-NS mergers

*Friday, 2 August 2024 09:30 (1h 30m)*

**Presenter:** SALAFIA, Om Sharan (INAF)

Contribution ID: 42

Type: **not specified**

## **EM observations from NS-NS mergers**

*Friday, 2 August 2024 11:30 (1 hour)*

**Presenter:** SALAFIA, Om Sharan (INAF)

Contribution ID: 43

Type: **not specified**

## **Welcome @ ECT\***

**Presenter:** VAN KOLCK, Ubirajara (IJCLab Orsay & University of Arizona)

Contribution ID: 44

Type: **not specified**

## **Student Presentations: Tiago Custodio, Luigi Scurto**

*Wednesday, 24 July 2024 14:00 (40 minutes)*

Contribution ID: 45

Type: **not specified**

## **Student Presentations: Martin Javier Nava, Hannah Göttling, Finia Jost**

*Friday, 19 July 2024 11:30 (1 hour)*

Contribution ID: 46

Type: **not specified**

## **Student Presentations: Sinan Long, Giuseppe Riviuccio, Nikita Kozyrev**

*Monday, 29 July 2024 14:00 (1 hour)*

Contribution ID: 47

Type: **not specified**

## **Student Presentations: Tiago Custodio, Luigi Scurto**

Contribution ID: 50

Type: **not specified**

## **Student Presentations: Milena Albino, Marcus Hatton**

*Tuesday, 30 July 2024 14:00 (40 minutes)*

Contribution ID: 51

Type: **not specified**

## **Student Presentations: Nithish Kumar, Heamin Ko, Alexander Clevinger**

*Tuesday, 23 July 2024 14:00 (1 hour)*