

Session Program

3-4 Aug 2022

SNEWS 2022 Collaboration Meeting & Hackaton

Collaboration Meeting

Purdue Physics, Room 223

Purdue University Physics Dept, 2nd floor. Some hybrid meetings via the usual zoom channel <https://zoom.us/j/7654943048> see email or slack for the password

Tuesday 2 August

09:00

Collaboration Meeting: Welcome & Modelling

Session |

Location: Purdue Physics, Room 223, Department of Physics & Astronomy, Purdue University, 525 Northwestern Avenue, West Lafayette, IN 47907. |

Conveners: Rafael Lang, Alec Thomas Habig

09:00–09:15

Welcome Address

Speaker

Rafael Lang

09:15–09:45

Core-Collapse Supernova: the role of equation of state and the accretion of Si/O interface

Speaker

Mr Luca Boccioli

09:45–10:15

Core-Collapse Supernovae : From neutrino-driven 1D explosions to light curves and spectra

Speaker

Dr Sanjana Curtis

10:30

11:00

Collaboration Meeting: Pre-supernova & Detector Response

Session |

Location: Purdue Physics, Room 223, Department of Physics & Astronomy, Purdue University, 525 Northwestern Avenue, West Lafayette, IN 47907. |

Convener: Dr Jost Migenda

11:00–11:30

Presupernova neutrinos: theory overview

Speakers

Cecilia Lunardini, Cecilia Lunardini

11:30–11:45

Presupernova neutrinos: experiments and discussion

Speakers

Andrey Sheshukov, Mr Andrey Sheshukov

11:45–11:50

TG3 Introduction

Speakers

Dr Jost Migenda, Dr Marta Colomer, Marta Colomer

11:50–12:05

SNOWGLoBES v1.3

Speakers

Sebastian Torres-Lara, Sebastian Torres-Lara

12:05–12:20

SNtools and generator comparison in SNO+

Speakers

Sammy Valder, Dr Sammy Valder

12:30

12:20-12:30

Inelastic charged current interaction of SN neutrinos in two-phase liquid xenon dark matter detectors**Speaker**

Sayan Ghosh

16:30

Collaboration Meeting: Detector Response**Session** |**Location:** Purdue Physics, Room 223, Purdue University Physics Dept, 2nd floor. Some hybrid meetings via the usual zoom channel <https://zoom.us/j/7654943048> see email or slack for the password |**Conveners:** marta colomer, Marta Colomer, Dr Jost Migenda

16:30-16:40

Reports from Breakouts**Speaker**

Rafael Lang

16:40-16:55

SNEWPY: Overview**Speaker**

Dr Jost Migenda

16:55-17:10

SNEWPY: Advanced Flavor Transformations**Speaker**

James Kneller

17:10-17:25

SNEWPY: Simple Rate calculation**Speakers**

Sonia El Hedri, Prof. Sonia El Hedri

17:25-17:40

EstrellaNueva**Speaker**

Prof. Eric Vázquez Jáuregui

18:00

Wednesday 3 August

09:00

Collaboration Meeting: Implementation & Triangulation

Session |

Location: Purdue Physics, Room 223, Purdue University Physics Dept, 2nd floor. Some hybrid meetings via the usual zoom channel <https://zoom.us/j/7654943048> see email or slack for the password |

Convener: Jeffrey Tseng

09:00–09:20

SNEWS Publishing Tools & Coincidence System

Speakers

Melih Kara, Sebastian Torres-Lara

09:20–09:25

SNAX: A supernova tool for XENONnT

Speaker

Melih Kara

09:25–09:40

CEvNS detection and SNEWS implementation in XENONnT

Speaker

Amanda Baxter

09:40–10:00

Supernova distance and time difference calculations

Speakers

Dr Marta Colomer, marta colomer

10:00–10:15

Determining t_0

Speaker

Remington Hill

10:15–10:30

DUNE pointing

Speaker

Mr Joshua Queen

10:30

11:00

Collaboration Meeting: Triangulation & Fire Drills

Session |

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11:00–11:15

Mass hierarchy and triangulation

Speakers

Vedran Brdar, Vedran Brdar, Dr Vedran Brdar

11:15–11:25

Making Sky-maps from time series comparisons

Speaker

Cal Hewitt

11:25–11:40

Towards supernova readiness and discussion

Speaker

Jeffrey Tseng

11:40–12:00

Plans for testing the system until follow-up

12:30

Speaker

Lindley Winslow

16:30

Collaboration Meeting: Multi-messenger & Outreach**Session** |**Location:** Purdue Physics, Room 223, Purdue University Physics Dept, 2nd floor. Some hybrid meetings via the usual zoom channel <https://zoom.us/j/7654943048> see email or slack for the password |**Conveners:** Dr Barry Pointon, Rafael Lang

16:30–16:40

Reports from Breakouts**Speaker**

Rafael Lang

16:40–16:50

Supernova Candidate List**Speaker**

Sarah Healy

16:50–17:10

Automating follow-up to a SNEWS alert**Speaker**

Dan Milisavljevic

17:10–17:25

Supernova App demonstration**Speaker**

Peter B Kramer

17:25–17:40

Progress in SNEWS Outreach**Speaker**

Dr Barry Pointon

18:00