Session Program

1–4 May 2023

3rd Workshop on Graph Neural Networks for Neutrino Telescope Event Reconstruction (GraphNeT III)

Presentations

Strandhotellet, Sandvig
Strandhotellet Strandpromenaden 7, Sandvig Bornholm, Denmark

Tuesday 2 May

09:00

Presentations: Tuesday I
Session | **Location:** Strandhotellet, Sandvig, Strandhotellet Strandpromenaden 7, Sandvig Bornholm, Denmark

09:00–09:15 **Welcome**

Speaker
Andreas Søgaard

09:15–09:45 **GraphNeT overview**

Speaker
Andreas Søgaard

09:45–10:30 **Representation learning using Graph Neural Networks**

Speaker
Raghavendra Selvan

10:30

11:00

Presentations: Tuesday II
Session | **Location:** Strandhotellet, Sandvig, Strandhotellet Strandpromenaden 7, Sandvig Bornholm, Denmark

11:00–11:30 **IceCube Kaggle Challenge**

Speaker
Philipp Eller

11:30–12:00 **Galactic plane search with DL in IceCube**

Speaker
Mirco Hünnefeld

12:00–12:30 **Event Classification for the ESSnuSB using GNNs**

Speaker
Kaare Endrup Iversen

12:30

17:00

Presentations: Poster session
Session | **Location:** Strandhotellet, Sandvig, Strandhotellet Strandpromenaden 7, Sandvig Bornholm, Denmark

17:00–17:05
Poster - Improving the direction and energy estimation of low-energy events in ANTARES with machine learning

Speaker
Juan García Méndez

17:05–17:10 **Poster - Impact of muon deflections on angular muon reconstructions**

Speaker
Pascal Gutjahr

17:10–17:15 **Poster - Detection and reconstruction of GeV neutrinos with IceCube**

Speaker
Karlijn Kruiswijk

17:15–17:20

Poster - Improving the sensitivity of KM3NeT in the MeV-GeV range using a GCN

Speaker

Jonathan Mauro

17:20–17:25

Poster - Ideas to measure the prompt component of the atmospheric muon flux

Speaker

Ludwig Neste

18:00

Wednesday 3 May

09:00

Presentations: Wednesday I
Session | **Location:** Strandhotellet, Sandvig, Strandhotellet Strandpromenaden 7, Sandvig Bornholm, Denmark

09:00–09:45 **GraphNeT results**

Speaker
Rasmus Ørsøe

09:45–10:30 **PyG 2.0**

Speaker
Matthias Fey

10:30

11:00

Presentations: Wednesday II
Session | **Location:** Strandhotellet, Sandvig, Strandhotellet Strandpromenaden 7, Sandvig Bornholm, Denmark

11:00–11:35 **Automatic hyperparameter optimization for Graph Neural Networks**

Speaker
Lukas Hennig

11:35–12:10 **Point-source search in IceCube, integration with GraphNeT**

Speaker
Tomas Kontrimas

12:10–12:30 **Ideas for IceCube**

Speaker
Troels Petersen

12:30

Thursday 4 May

10:00

Presentations: Friday I
Session | **Location:** Strandhotellet, Sandvig, Strandhotellet Strandpromenaden 7, Sandvig Bornholm, Denmark

10:00–10:30   **Roadmap towards v2.0 – mini-workshop introduction**

Speaker
Andreas Søgaard

10:30

11:00

Presentations: Friday II
Session | **Location:** Strandhotellet, Sandvig, Strandhotellet Strandpromenaden 7, Sandvig Bornholm, Denmark

11:00–12:10   **Roadmap towards v2.0 – mini-workshop**

Speaker
Andreas Søgaard

12:10–12:30   **Summary, next workshop, and goodbye**

Speaker
Andreas Søgaard

12:30