

Co-located with IEEE WiSEE 2026

STINT 2026

Space-Terrestrial Internetworking Workshop

The Forum for Delay-Tolerant and Space Networking Research

📅 September 14–15, 2026 📍 Irish College, Leuven, Belgium

Opening & Welcome · Organizing Committee

Welcome to STINT 2026

Thirteenth edition of the workshop, two full days, single track.

STINT brings together researchers and practitioners working on networking in **space-terrestrial environments**:

Delay-Tolerant Networking, routing and contact planning, IoT in space, and hybrid space-terrestrial architectures.

4

KEYNOTES

4

INVITED TALKS

10

PAPERS

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POSTERS

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PROJECT
SESSIONS

1

PANEL

Thirteen editions, one community

STINT alternates between IEEE WiSEE and IEEE SMC-IT since 2014.



13

EDITIONS

7

COUNTRIES

2

IEEE CONFERENCE SERIES

Thirteen editions, one community

Some of the faces behind the twelve editions so far.



2014 · 1st edition
Laurel, MD



2017 · 4th edition
Alcalá de Henares



2018 · 5th edition
Huntsville, AL



2019 · 6th edition
Pasadena, CA



2023 · 10th edition
Aveiro



2023 · 10th edition
Aveiro



2024 · 11th edition
Mountain View, CA



2024 · 11th edition
Mountain View, CA



2024 · 11th edition
Mountain View, CA



2025 · 12th edition
Halifax, NS

Organizing Committee

General chairs and programme co-chair of STINT 2026.



Juan A. Fraire

Inria-CONICET

General Chair



Scott Burleigh

NASA JPL (Retired)

General Chair



Edward Birrane

Johns Hopkins University APL

General Chair



Marius Feldmann

D3TN

General Chair



Carlo Caini

Bologna University

Program Co-Chair

Our thanks to the **IEEE WiSEE 2026 organising team at KU Leuven** for hosting STINT, and to the **reviewers** for their time.

Keynote Speakers

Four keynotes, two per day. Each runs 35 minutes including questions.



Edward Birrane

Johns Hopkins University APL, USA

"Great networks start with great nodes: building routers for the solar system internet"

MON 09:55 · OPENING & KEYNOTE I



Marius Feldmann

D3TN GmbH, Germany

"Simplifying Consumption of Delay- and Disruption-Tolerant Networking Capabilities"

MON 13:30 · KEYNOTE II & INVITED



Felix Flentge

European Space Agency (ESA)

"DTN – Standardisation & Governance: A Perspective from the European Space Agency"

TUE 09:45 · KEYNOTES III & IV



Alberto Montilla

Spatiam Corporation, USA

"From Missions to Infrastructure: Building the Interplanetary Network"

TUE 10:20 · KEYNOTES III & IV

Day 1 • Monday, 14 September

Full programme online →
stintworkshops.org · all PDFs · .ics calendar

09:45–11:00

Chair: Juan Fraire

Opening & Keynote I

- | | | |
|------|---|--------|
| OPEN | Opening & welcome — Organizing Committee | 10 min |
| KEY | Edward Birrane · JHU/APL
<i>Great networks start with great nodes: building routers for the solar system internet</i> | 35 min |
| INV | Martin Tanchev · Goce Delcev University
<i>Self-Authenticating Addresses for Post-Quantum DTN</i> | 20 min |

Coffee break 11:00–11:15

11:15–12:30

Chair: Carlo Caini

Session 1 — Routing & Topology

- | | | |
|-----|---|--------|
| PAP | Juan A. Fraire
<i>On the Distribution of DTN Reachability Information: Push-vs-Pull</i> | 20 min |
| PAP | Shota Suzuki et al.
<i>IR-CGR: Time-Aware Inter-Region Contact Graph Routing</i> | 20 min |
| PAP | Andre Ibrahim et al.
<i>Network-Layer Evaluation of Optical CPD under PAT Constraints</i> | 20 min |

Lunch 12:30–13:30

13:30–14:45

Chair: Edward Birrane

Keynote II & Invited

- | | | |
|-----|---|--------|
| KEY | Marius Feldmann · D3TN
<i>Simplifying Consumption of Delay- and Disruption-Tolerant Networking Capabilities</i> | 35 min |
| INV | Juan Fraire
<i>Light-Time-Corrected Contact Plans: Re-Introducing Contact Plan Designer</i> | 20 min |

Coffee break 14:45–15:00

15:00–16:15

Chair: Alberto Montilla

Session 2 — Protocols & Integration

- | | | |
|-----|---|--------|
| PAP | Carlo Caini et al.
<i>Integrating LoRa Nodes into Global DTN Networks (muON)</i> | 20 min |
| PAP | Oriol Fusté et al.
<i>Deploying QUIC in Challenged Networks</i> | 20 min |
| PAP | Mathias Durat et al.
<i>CSPCL: Non-Disruptive Transition to DTN for CubeSat Operators</i> | 20 min |
| PST | Poster Lightning Madness — 9 posters × ~1 min | 15 min |

Welcome activity 18:00 · Leuven Botanical Garden

Bring your poster on Tuesday morning!
16:00 today: one-minute pitches · boards go up **Tuesday**

Day 2 · Tuesday, 15 September

Full programme online →
stintworkshops.org · all PDFs · .ics calendar

09:45–11:00

Chair: Marius Feldmann

Keynotes III & IV

- KEY** **Felix Flentge** · ESA 35 min
DTN — Standardisation & Governance: A Perspective from the European Space Agency
- KEY** **Alberto Montilla** · Spatiam 35 min
From Missions to Infrastructure: Building the Interplanetary Network

Coffee break 11:00–11:15

11:15–12:30

Chair: Felix Flentge

MISSION Session

- INTRO** MISSION project introduction — **Jorge Finochietto** 10 min
- PAP** **Ramiro Detke et al.** 20 min
Security-Aware Route Selection in DTNs: Key Provisioning
- PAP** **Simon Rink et al.** 20 min
CGR: A* Search for Contact Graph Routing*
- PAP** **Alejandro Toledo et al.** 20 min
Lifespan-Aware Contact Plan Design for Interplanetary FSO Networks

Lunch 12:30–13:30

13:30–14:45

Chair: Jorge Finochietto

D3-CONNECT & Modeling

- INTRO** D3-CONNECT introduction — **Juan Fraire** 5 min
- INV** **Wesley Woo** · Virginia Tech 20 min
Anyone, Anywhere, not Everyone, Everywhere: Starlink Doesn't End the Digital Divide
- INV** **Tenzin Ukyab** · UC Berkeley 20 min
Beyond the Cone Model: Quantifying the Impact of Beam-Level Constraints on LEO Satellite Networks
- PAP** **Konrad Fuger et al.** 20 min
Modeling the Performance of Priority Queueing for Space Communication

Coffee break 14:45–15:00

15:00–16:15

Moderator: Juan Fraire

Panel & Closing

- PNL** **DTN / Internet Integration** 60 min
Ed Birrane · Felix Flentge · Marius Feldmann · Alberto Montilla · Kanglian Zhao
- END** Closing remarks 10 min

Conference banquet 18:00 · De Hoorn

Two project sessions on Tuesday

Research projects behind part of this year's programme, each with its own session.



MISSION

TUE 11:15–12:30 · Chair: Felix Flentge

Project introduction by **Jorge Finochietto**, followed by three papers:

- Security-aware route selection in DTNs (Detke et al.)
- CGR*: A* search for contact graph routing (Rink et al.)
- Lifespan-aware contact plan design for interplanetary FSO networks (Toledo et al.)

mission-project.eu



D3-CONNECT

TUE 13:30–14:45 · Chair: Jorge Finochietto

Introduction by **Juan Fraire**, then two invited talks and a paper:

- **Wesley Woo** (Virginia Tech): Starlink and the digital divide
- **Tenzin Ukyab** (UC Berkeley): beyond the cone model for LEO networks
- Priority queueing for space communication (Fuger et al.)

d3-connect.space

Posters

Lightning Madness on Monday at 16:00: nine posters, one minute each. Posters go up on **Tuesday morning** and stay on display all day.

PST

W-KAST: predictive optical link-state estimation for LEO

Qingfang Jiang, Kanglian Zhao, Jianhao Yu

PST

A tool suite towards a Solar System Internet digital twin

Alice Le Bihan, Lucas Poulhe, Juan A. Fraire, Pierre Francois, Felix Flentge

PST

Ultra low-power DTN framework for LoRaWAN

Moez Altayeb (ICTP, Trieste)

PST

UQEB: user QoS extension block for space DTNs

Teresa Algarra Uliarte, Felix Flentge, Andreas Timm-Giel

PST

Space-terrestrial integrated IoT: research and open-source tools

Benoît Coeugnet, Alexander Choquenaira Florez, Juan A. Fraire

PST

Interfacing strategies for DTN inter-networking

Théo Tchilinguirian, Thibaut Scoto Di Suoccio, Olivier De Jonckère

PST

LunaNet-Sim: browser-based 3D testbed for cislunar DTN

Syed Talha Jamal, Saad-Ullah-khan, Daniyal Ahad (SSUET)

PST

Reducing topology advertisements via GS handover scheduling

Nicolas Rybowski, Tom Rousseaux, Maxime Piraux, Cristel Pelsser, Olivier Bonaventure

PST

Space-testing of picoD3TN through ESA's OPS-SAT Space Lab

Max Chateau, Marius Feldmann, Felix Walter (D3TN)

Bring your poster on Tuesday morning!
16:00 today: one-minute pitches · boards go up **Tuesday**

Closing panel: DTN / Internet integration

Tuesday 15:00–16:00 · Moderator: Juan Fraire · followed by the closing remarks at 16:00.



Edward Birrane

Johns Hopkins University APL



Felix Flentge

European Space Agency



Marius Feldmann

D3TN GmbH



Alberto Montilla

Spatiam Corporation



Kanglian Zhao

Nanjing University

Where do DTN and the Internet meet?

Naming, addressing, transport, and the boundary between both worlds.

What is missing to operate at scale?

Standards, governance, tooling, and the road from missions to infrastructure.

Your questions

Collect them over the two days; the floor is open for the full hour.

Everything is on the website

The complete programme lives at stintworkshops.org.



Full programme with times and chairs

Every session, talk and break, exactly as presented here.



Paper and poster PDFs

Open any paper or poster card and click the PDF button.



Add to calendar (.ics)

All eight sessions in local time (Europe/Brussels).



Speaker bios, venue and travel

Keynote profiles, the Irish College map, and how to get around Leuven.



stintworkshops.org

Practical notes

Irish College Leuven, Janseniusstraat 1. Registration desk open from Monday 08:15.

Speakers

Load your slides on the room computer **before your session starts**. Papers have 20 minutes including Q&A, invited talks 20, keynotes 35. Session chairs keep the clock.

Social programme (WiSEE)

Monday 18:00–20:00: welcome activity at the Leuven Botanical Garden, Kapucijnenvoer 30.

Tuesday 18:00–20:00: conference banquet at De Hoorn, Sluisstraat 79. Volunteers walk over from the desk at 17:30.

Proceedings

Full papers are part of the **IEEE WiSEE 2026 proceedings** (IEEE Xplore). The PDFs of all papers and posters are one click away on stintworkshops.org.

Sponsors and supporters

STINT 2026 is made possible by



The background features a view of Earth from space, showing the horizon and a blue atmosphere. Overlaid on this is a dark blue network diagram with circular nodes and connecting lines. A small, reddish-brown button with the text "Let's begin" is positioned above the main title.

Let's begin

STINT 2026

Enjoy the workshop

Up next: Keynote I

Edward Birrane · Johns Hopkins University APL

"Great networks start with great nodes: building routers for the solar system internet"