



Infoshare: Advanced Fibre Sensing Techniques and Monitoring Systems

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GÉANT GN5-2-WP6T1-FS

Infoshare

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Public (PU)

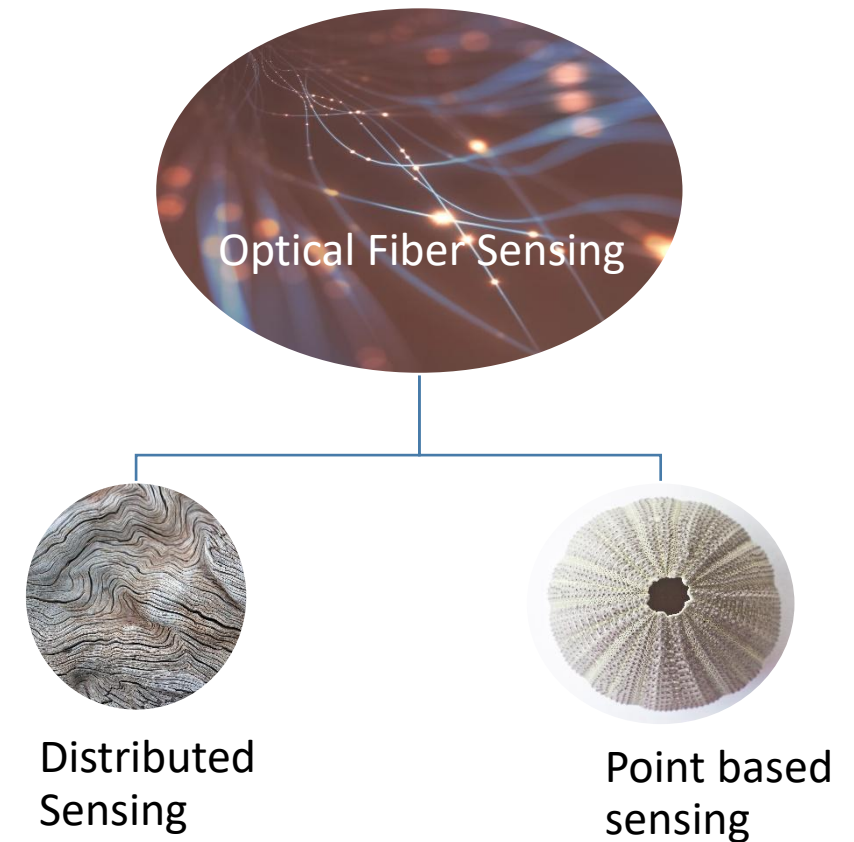
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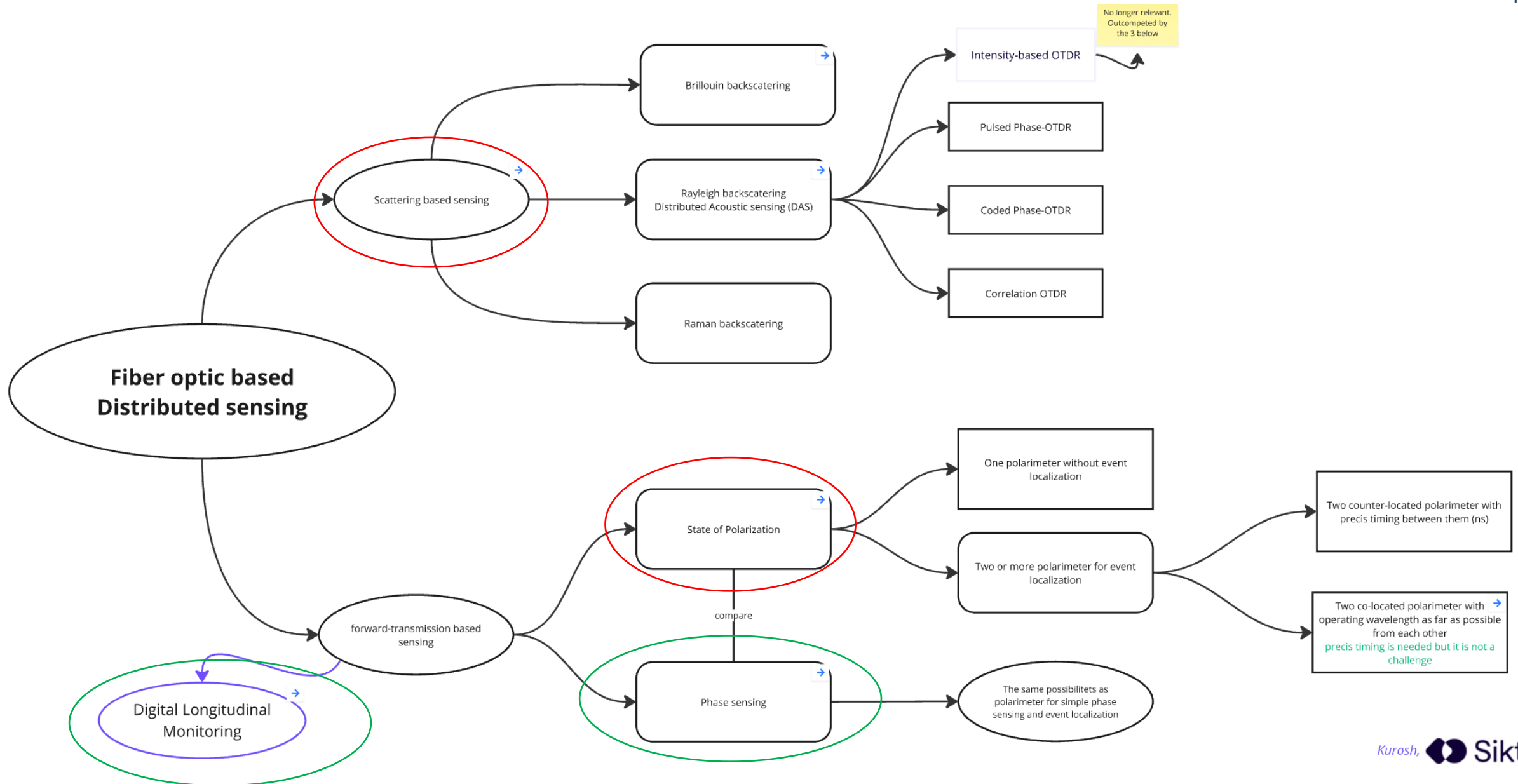
Agenda

- 13:00 → 13:35 Introduction
- 13:10 → 13:35 Coherent Interferometry Sensing
 - Simone Donadello, Istituto Nazionale di Ricerca Metrologica (INRiM)
- 13:35 → 14:00 Digital Longitudinal Monitoring of Optical Fibre Communication Link¶
 - Takeo Sasai (NTT)
- 14:00 → 14:25 Quantum Sensing¶
 - Piotr Rydlichowski (PCSS)
- 14:25 → 14:45 Q&A

Optical Fiber sensing

- Point based sensing: discrete sensors measuring at pre-determined points (exist for decades)
 - A widely used device for that is “Fiber Bragg Grating”
 - Smart cables (new submarine cables with integrated sensing devices)
- Distributed sensing utilizes the optical fiber to enable simultaneous measurements at multiple locations along the fiber
 - widely based on Scattering properties of the light
 - State Of Polarization
 - Phase Interferometry





Fiber Sensing workshop @ TNC2026
On Wed 10 June
Helsinki

tnc26[Programme](#)[Register](#)[Visit Helsinki](#)**LUNCH**

12:30-14:00 | Music Hall

SIG NOC Get Together

13:00-14:00 | Community Hub 7 | Community Hub

**Workshop: Fibre Sensing - Part One**

14:00-15:30 | Terrace Foyer | Workshop

**Scale Matters - Eventually**

14:00-15:30 | Concert Hall | Sessions

**Rebooting the Old Reliables**

14:00-15:30 | Paavo | Sessions

**Modern Software for Modern Networks**

14:00-15:30 | Black Box | Sessions

**Digital Sisu Around the World**

14:00-15:30 | Camerata | Sessions

**Powering Data-Intensive Science: Monitoring, AI Factories and EuroHPC**

14:00-15:30 | Community Hub | Community Hub

**COFFEE BREAK**

15:30-16:00 | Music Hall

Lightning Talks: Strike One

16:00-17:30 | Concert Hall | Plenaries

**Network Visibility and Monitoring**

16:00-17:30 | Black Box | Sessions

**The NREN Strategy Journey**

16:00-17:30 | Paavo | Sessions

**Workshop: Fibre Sensing - Part Two**

16:00-17:30 | Terrace Foyer | Workshop

**TNC26 Conference Dinner**

19:00-22:30 | Wanha Satama | Socials





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WP6 T1 Fibre Sensing



Thank You

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