



# Nordic Institute of Navigation (NNF)

Org.nr: NO – 970 016 341

[www.nornav.org](http://www.nornav.org)

## Seminar on Safety and Security Issues in Positioning, Navigation and Timing

Wednesday, June 14<sup>th</sup> 2023 at 9:30 – 15:55

Hosted by SINTEF Digital, Forskningsveien 1, Oslo, Norway

Meeting room: C.114 Panteautomaten

### Time Topic and speaker

09:30 Coffee and mingle

10:00 Welcome by the NSA, Norwegian Space Agency

10:05 Welcome by the NNF, Anna Jensen, NNF

10:10 Status on RFI in Europe, Aiden Morrison, SINTEF, Norway

10:30 Jammer test in Norway in 2022 and plans for 2023, Nicolai Gerrard, NKOM, Norway

10:50 Some results from JammerTest2022, Mika Saajasto, FGI, Finland

11:10 Break

11:25 Navigation Message Authentication, Cillian O'Driscoll, Ireland

11:45 Reliable Precise Time Dissemination, Tor Melgaard, Fugro, Norway

12:05 Limitation in timing and time transfer, Harald Hauglin, Justervesenet, Norway

12:25 Lunch

13:30 High Latitude Ionospheric Gradient Observation Results from a Multi-Scale Network, Nadia Sokolova, SINTEF, Norway

13:50 GNSS and Scintillation in Greenland, Sarah Beeck, Technical University Denmark, Denmark

14:10 Performance Based Navigation - on aviation's marriage to satellites, Jens Gjerlev, Widerøe, Norway

14:30 Coffee break

14:45 Status on R-mode for Maritime Navigation, Cato Eliassen, Kongsberg, Norway

15:05 Robust Navigation in the Maritime Domain, Odd Sveinung Hareide and Bjørnar Kleppe, Norwegian Coastal Administration Pilot Service, Norway

15:25 Dynamic Categorizations of Seas and Waters, Erik Sandberg, RISE, Sweden

15:45 – 15:55 Wrap up and goodbye, Anna Jensen, NNF

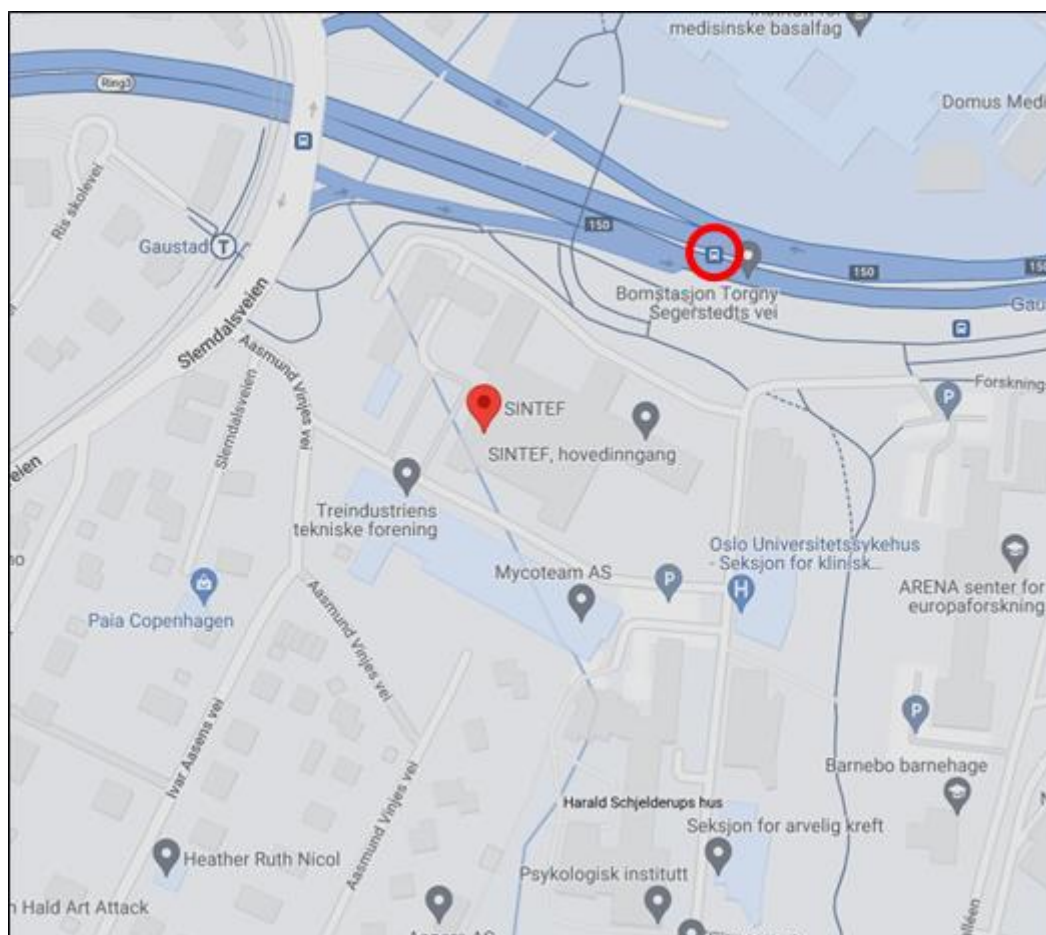
16:00 – 17:00 General Assembly of the NNF. Only for members of the NNF.

## Travel Directions

From Oslo Airport (Gardermoen):

The easiest option is to take the bus FB3A (Oslo lufthavn - Storo - Bekkestua - Lommedalen via Radiumhospitalet) to the stop named Gaustad (marked with a red circle), which is a 2-minute walk to the venue. The bus schedule can be found here

[https://www.flybussen.no/media/vikge3cf/rutetabeller-fb3a-2023\\_02\\_27.pdf](https://www.flybussen.no/media/vikge3cf/rutetabeller-fb3a-2023_02_27.pdf)



It is also possible to travel by Flytoget from the airport to the Oslo S station and take the subway to either Gaustad (line 1 direction Frognerstøya) or Blindern (line 5 direction Sognsvann) station which are a 4 and 10-minute walk to the venue, respectively.

Please RSVP to [Aiden.Morrison@sintef.no](mailto:Aiden.Morrison@sintef.no) by end of business on 12 June 2023. A link can be provided for remote attendees, while space at the venue for in-person attendance is limited.