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OpenSky Workshop 2015

Room 114, 1st Floor, Robert Hooke Building, Computer Science Department, Oxford

Directions: <https://www.cs.ox.ac.uk/aboutus/directions.html>

(Select Robert Hooke Building)

Thursday, 26. Nov.

09:00 – 09:15 Welcome & overview (Ivan Martinovic)

09:15 – 09:30 Introduction (All)

09:30 – 12:30 **Session: OpenSky** (incl. 30-min break)

The OpenSky Network: Past, Present and Future Directions

Vincent Lenders (50')

OpenSky's Big Data Architecture

Markus Fuchs (50')

Algorithms and Tools for Processing OpenSky's Raw Data

Matthias Schäfer (25')

12:30 – 14:00 **Lunch (and Discussion)**



14:00 – 17:00 **Session: Research** (incl. 30-min break)

Introduction to Mode-S non-ADS-B... or: The Remaining 88% of Mode-S

Rui Pinheiro (50')

Using Standard and Directional ADS-B together with other Operational Messages to Enrich Commercial Airport Information and Billing Systems

Steffen Reithermann (25')

Message Loss on the 1090 MHz Channel

Matthias Schäfer (50')

19:00 – 21:00 **Dinner** (Invitation) Oxford City

Friday, 27. Nov.

09:00 – 12:00 **Session: Security I** (incl. 30-min break)

ATC Data Link Security

Matt Smith (25')

Detection of Distributed Location Spoofing Attacks in ADS-B Multilateration Systems

Patrick Leu (50')

Drones and Location Verification

Richard Baker (25')

12:00 – 14:00 **Lunch (and Discussion)**



14:00 – 16:30 **Session: Security II** (incl. 30-min break)

**Traffic Alert and Collision Avoidance System (TCAS)
Security**

Daniel Moser (25')

Detecting Anomalies in Air Traffic

Alina Freund (25')

Air Traffic Security Research

Martin Strohmeier (50')

16:30 – 17:00 **Next Steps (All)**