

Industrial Workshop

Organiser: Erik Jørgensen

Company/Organisation: TICRA

Title: Advances in TICRA Tools and Future Developments for AI and Array Antennas

Abstract: TICRA has for decades developed state-of-the-art antenna design and analysis software that has established itself as the industry standard among satellite antenna designers and manufacturers. The software tools are available in the TICRA Tools framework and can be used to model advanced antenna systems including reflector antennas, feed systems, reflectarrays and FSS, as well as satellite structures and more general antennas. With antenna arrays and artificial intelligence (AI) currently in the spotlight of the antenna community, TICRA, as innovators in the field, is dedicated to advancing modelling tools in those areas. Join our workshop to explore TICRA Tools as well as our latest research on AI and array antenna modelling.

The workshop will combine presentation and software demonstration. It will be divided into three parts:

- 1) Introduction to TICRA Tools: What it is and what it can do
- 2) Recent additions to TICRA Tools
- 3) Presentation of TICRA's latest R&D within AI and full-wave modelling algorithms for large antenna arrays. Several application examples are shown to illustrate how AI-based design approaches and dedicated array modelling algorithms will benefit future releases of TICRA Tools

Speakers:



Erik Jørgensen is CTO at TICRA, where he is responsible for new developments as well as maintenance of TICRA's commercial software products. Additionally, Erik is involved in formulating and efficiently implementing new EM modelling algorithms in user-friendly product environments. With his background within full-wave analysis, he has significantly contributed to the full-wave methods in TICRA Tools.



Tonny Rubæk is Product Lead for TICRA's Reflector Antenna Software and part of the Applied Electromagnetics team where he focusses on the industrial application of TICRA's software and antenna system design and analysis. Prior to joining TICRA Tonny worked at OHB Systems as Antenna Systems Engineer.