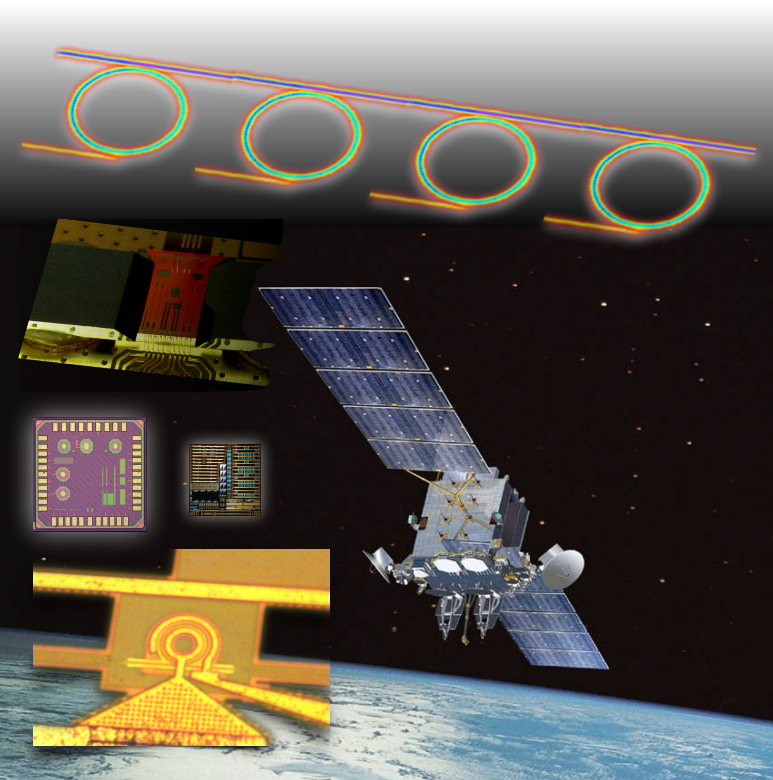


SiPhoSpace – Radiation-tolerant high-speed optical data transmission for space applications

Short description of the aim(s) of the Project: To dramatically increase the throughput of radiation tolerant optical data communications systems by adapting Silicon Photonics technology for use in space. The seed money provided by the first ATTRACT phase is allowing us to determine the feasibility of our 100 Gb/s Silicon Photonics transceiver concept.



Current status of progress:

% of deliverables completed so far: ~60

% of budget (100 kEUR) spent so far: 56

Any remaining uncertainties w.r.t planned deliverables

- No
 Yes

Using students (PhD/MSc/BSc) in the project?

- No
 Yes: MSc Student in PISA, PhD Student at CERN

Any interactions with other funded ATTRACT projects so far?

- No
 Yes

If your project were to be selected for ATTRACT Phase 2:

How would your technology scale up to become an industrial product/system?

Not very clear: Business model for Space Component Suppliers opaque...

With who you would need to partner for this to happen? (No names, just profiles of type of organizations)

Firstly, someone willing to take on the role of coordinator and author of a Phase 2 proposal.

Have you already discussed this with KT Group?

Indirectly, yes. They are aware that the CERN team is not interested in coordinating a Phase 2 proposal

What applications will you demonstrate with value for science, industry and society? (Examples)

TBD

Any comments, remarks or observations you would like to make to CERN?

The CERN team does not want to pursue Phase 2 funding – the product development challenges are not well aligned with our core R&D programme. A professor at the University of Pisa, associated with the INFN team in our consortium, is interested to take the concept further, but this is still under discussion, especially what burden this would place on our limited resources at CERN. The other project partners (Bristol Uni, KIT) are not interested in driving a Phase 2 proposal forwards.