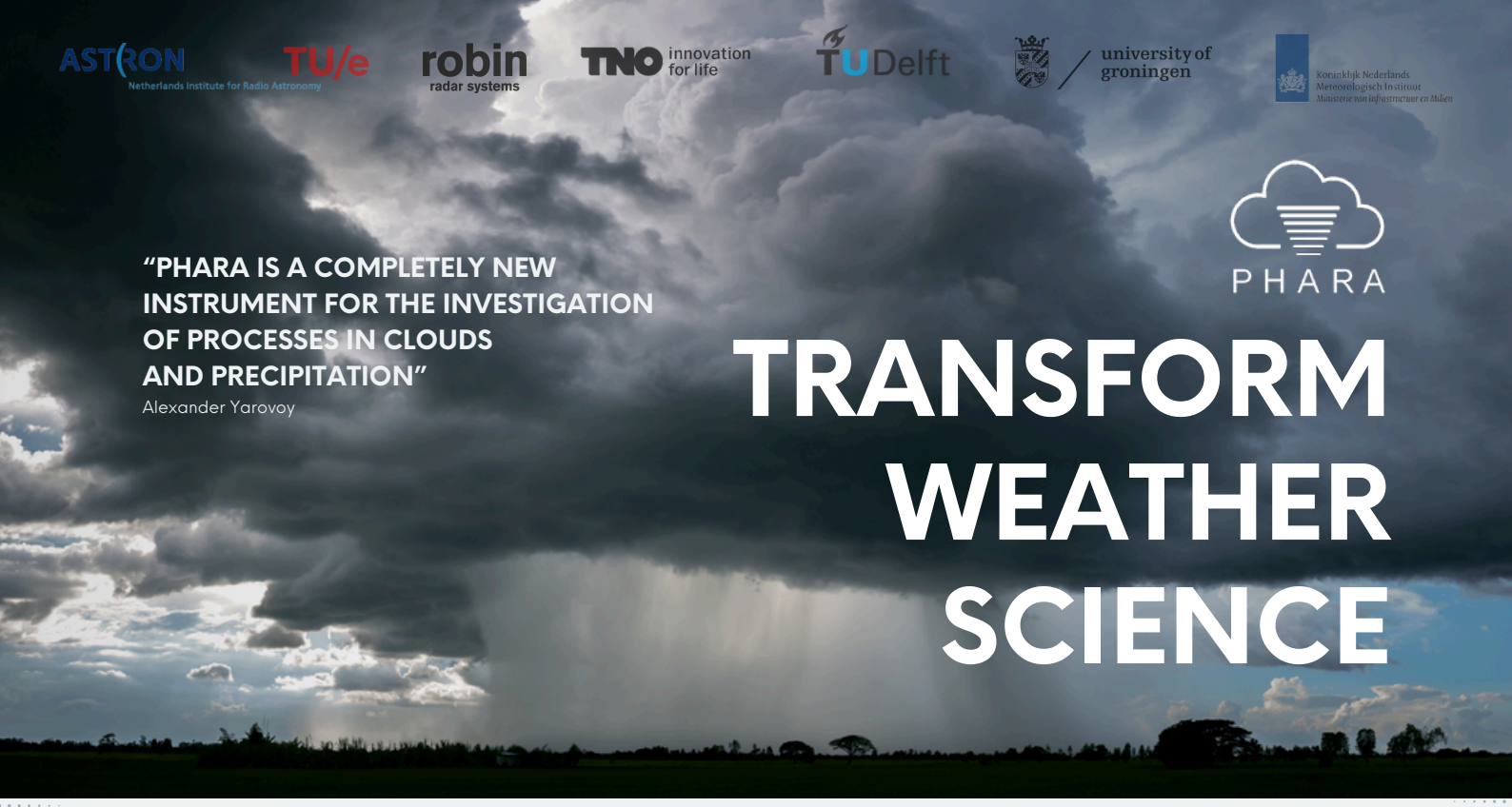

"PHARA IS A COMPLETELY NEW INSTRUMENT FOR THE INVESTIGATION OF PROCESSES IN CLOUDS AND PRECIPITATION"
Alexander Yarovoy

PHARA

# TRANSFORM WEATHER SCIENCE

## About PHARA

With PHARA we develop and realize a first-of-its-kind research infrastructure for atmospheric and weather sciences: a fast-scanning phased-array radar at Ku-band with polarization diversity. PHARA will enable the continuous tracking of cloud volumes and the direct measurement of microphysical processes. Furthermore, this radar will provide high-resolution precipitation observations to aid in climate-smart city planning and operational water management.

## Innovations

- Polarimetric waveform agility
- Multi-beam management
- Agile beamforming and scanning for 3D imaging
- Multiple mode operation (cloud mode, precipitation mode)
- Integration of multi-frequency radars
- Ku-band waveforms

### Smart Cities

Radars are crucial for metropolitan areas to manage frequent, intense rainfall and to gather high-resolution precipitation data for climate-smart city planning and water management.

### Sustainable Energy

Energy providers can benefit from PHARA by accurately measuring 3D wind behavior near wind farms and detecting the presence of birds, bats, and insects in the vicinity.

### Ecology & Environment

The PHARA facility can estimate and track migratory movements of insects and birds. It can also monitor sea life.

## Join Our Research Cloud

Do you want to explore the possibilities to collaborate? Get in touch with our researchers.

**Scan for more information**

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