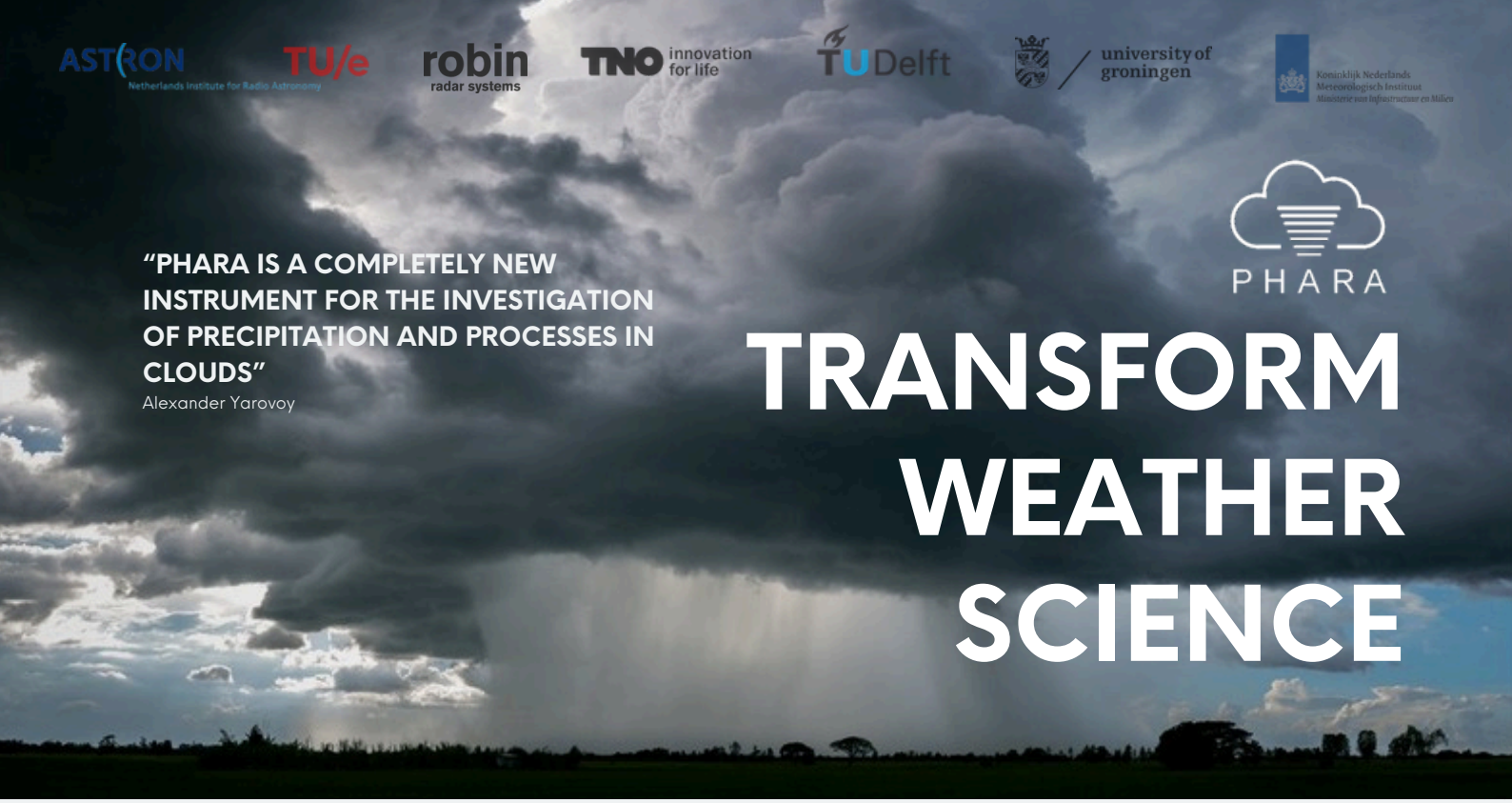

"PHARA IS A COMPLETELY NEW INSTRUMENT FOR THE INVESTIGATION OF PRECIPITATION AND PROCESSES IN CLOUDS"
Alexander Yarovoy

PHARA

TRANSFORM WEATHER SCIENCE

About PHARA

With PHARA (PHased Array Radar for Atmospheric Research) we develop a first-of-its-kind research infrastructure for atmospheric and weather sciences: a fast-scanning phased-array radar at Ku-band with polarisation 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 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)
- Multi-band radar network integration
- Ku-band waveforms

Smart Cities

Radars are crucial for metropolitan areas to anticipate on 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 behaviour near wind farms and detecting birds, bats, and insects around wind farms

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 for collaboration? Get in touch with our researchers.

Scan for more information

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