OAM-MIMO multiplexing transmission technology

Terabit-class wireless transmission for beyond 5G

Abstract
To accommodate continuously increasing wireless traffic, we are working on terabit-class wireless transmission technology. We devised a new wireless transmission technology (OAM-MIMO) that uses orbital angular momentum for spatial multiplexing transmission. We have succeeded in over 100 Gbps transmission at a distance of 200 m in the 40 GHz band.

Features
- Transmitting different signals at the same time using radio wave of different OAM modes
- Increase the spatial multiplexing order hugely with concentrically arranged multiple UCAs

Application Scenarios
- Wireless backhaul and fronthaul
- Complement of optical fiber connections

Roadmaps
- We aim to establish terabit-class wireless transmission technology ahead of the rest of the world for practical application around 2030.

Exhibitors
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