

## A Linear Frequency Modulated bistatic radar for on-the-ground object detection

### ABSTRACT

A radar system for detecting and localizing small targets on the ground is proposed in this paper. The system transmits wideband Linear Frequency Modulated pulses from ground-based transmitter. The reflected pulses will be collected simultaneously by two different ground-based receivers installed in different bistatic positions. Accurate range processing in this bistatic configuration will lead us to detect small objects like N-type connectors in several meters distances.

**Keyword:** Bistatic; LFM; On-the-ground; UWB