

# Design and preliminary characterizations of traveling wave parametric amplifiers for DARTWARS

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**goal:** development of high performance amplifiers following both the approach of KIT and TWJPA.

- Prototype of a TWJPA already fabricated, but uniformity and fine-tuning of the Josephson Junctions fabrication steps need to be optimized.
- KIT films deposition test successfully made, amplifier design in progress. First prototype of a KIT expected this year!

3 Wave Mixing - Pump OFF    3 Wave Mixing - Pump ON

