

# International Workshop on Breakdown Science and High Gradient Technology (HG2021)

Contribution ID: 61

Type: **not specified**

## UCLA High Gradient Cryogenic RF Research Program

*Monday, 19 April 2021 07:00 (30 minutes)*

We present an overview of the various research thrusts embraced by the UCLA program in very high field cryogenic RF acceleration, beginning with roots in both X- and S-band, and extending through a vigorous program in developing C-band accelerating structures. These are employed in extremely high brightness electron sources for both linear colliders and ultra-compact X-ray free-electron lasers (UC-XFELs). They are also planned for use in high gradient linacs that enable 1 GeV beams for the UC-XFEL project. This initiative is described, and its critical demands on cryogenic RF technology are reviewed.

### Summary

**Presenter:** ROSENZWEIG, James (UCLA)

**Session Classification:** Session 1