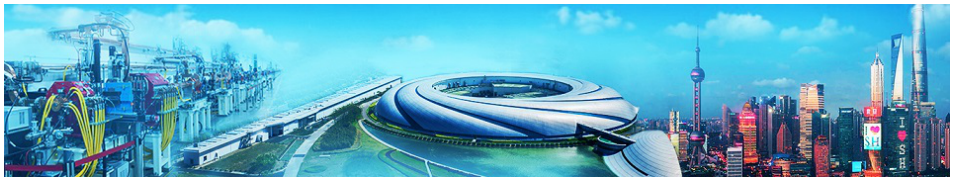

Contribution ID: **49** Type: **not specified**

A High Gradient Solution for Increasing the Energy of the FERMI Linac

Wednesday 6 June 2018 11:50 (25 minutes)

FERMI is the seeded Free Electron Laser (FEL) user facility at Elettra laboratory in Trieste, operating in the VUV to soft X-rays spectral range. In order to extend the FEL spectral range to shorter wavelengths, a feasibility study for increasing the Linac energy from 1.5 GeV to 1.8 GeV is actually ongoing. The design of new S-band accelerating structures, tailored for high gradient operation, low breakdown rates and low wakefield contribution, is presented. First test results of a short prototype built in collaboration with Paul Scherrer Institut (PSI) will also be reported.

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Session Classification: Project