26th ESLS RF Workshop



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PETRA IV activities @ DESY

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PETRA III is to be upgraded to a next-generation synchrotron radiation source (PETRA IV).

In addition to extensive infrastructure construction activities, the RF systems will also be rebuilt in a new RF building.

The booster (DESY II) will as well be rebuilt in the old DESY synchrotron tunnel.

This means that we will say goodbye to klystrons and the majority of multicell cavities and switch to semiconductor amplifiers and HOM-damped cavities.

In addition to the 500 MHz fundamental system, a third harmonic system will also be needed.

This is a report about the construction activities, experiences with a 500 MHz prototype system (SSA, HOM-damped cavity as well as LLRF system).

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