

## **New BESSY Booster Solid State Kicker Pulsar Power Supplies**

*Tuesday 25 April 2023 15:00 (30 minutes)*

The BESSY booster kicker magnets have been powered with PFL type kicker pulsers since the BESSY II project was accomplished successfully. The kicker pulsers systems were realized with floating switch topologies applying CX 1154 thyratrons. After more than 25 years of operations the applied thyatron based kicker pulser units show wear and tear. The used pulser technology has obstacles for the operations of modern 4th generation light sources that should be overcome.

The plan is to replace the existing technology with the help of solid-state Marx generator units. Therefore, a BESSY II booster kicker pulser renewal project has been launched.

The talk is about the basic idea of replacing the thyatron switch technology, wherever possible, will explain the experience with the existing equipment and tell about technological limitations in applying solid state switches. To conclude, the status of the project will be described.

**Presenter:** DRESSLER, Olaf (Helmholtz-Zentrum Berlin)

**Session Classification:** Afternoon session