



Contribution ID: 30

Type: **invited**

## Diagnostic System for Low Level RF Control System for VUV-FEL

*Wednesday, 12 October 2005 11:50 (20 minutes)*

In order to provide a continuous work of the VUV-FEL and high stable RF field during pulse is necessary to monitor all parameters of the Control System. An advanced algorithms looking for a correlation between data from different subsystems of the LLFR, on-line measure field parameters , produce information about current condition and performance of the LLRF Control System.

Diagnostic system requires some additional hardware –test signals, monitoring points

for analog and digital signals. It is necessarily to integrate diagnostic system into

control system to increase productivity and decrease cost of the system. If performance degradation is detected it is possible make action (e.g. calibrate system

or check subsystem) before an error appear and do not break operation. This article describes the Construction and principles of the performance detection algorithms and

requirements for hardware are presented.

**Primary author:** JEZYNSKI, Tomasz (Technical Univ. of Lodz)

**Presenter:** JEZYNSKI, Tomasz (Technical Univ. of Lodz)

**Session Classification:** Talks Session 3