

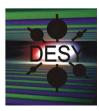


# Transverse Phase Space Studies

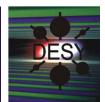
T. Limberg

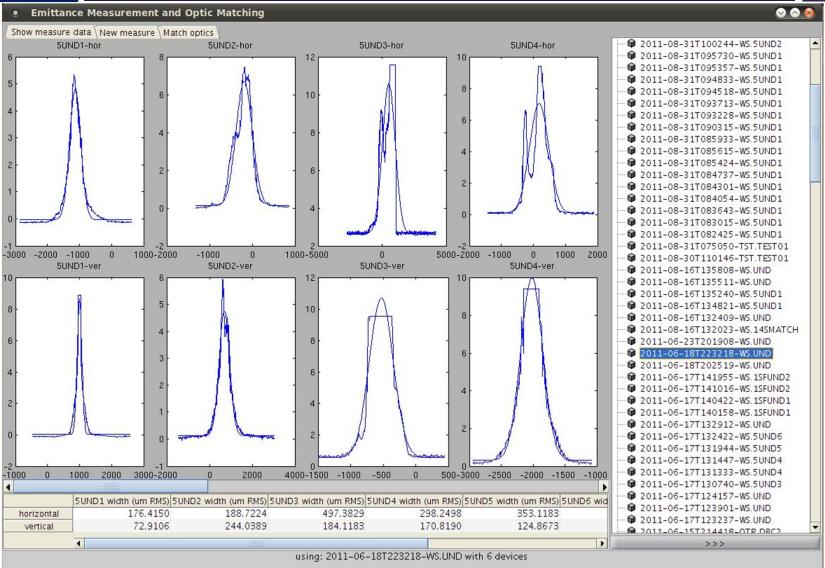


### Regularly



- Lattice Diagnostics
- Further Orbit Feedback Commissioning
- Energy Server Upgrade and Commissioning
- Optics Matching in DBC2, Collimator Region and Undulator



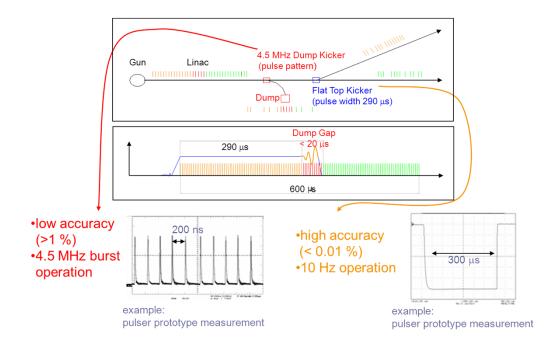




#### Transverse Fast Feedback and Kicker Studies



- PSI electronics commissioning
- Kicker Studies





# Dynamics Undulator Orbit Studies



- Famous 'Banana'-shape still not understood
- BBA needs to be continued



# Wavelength Change

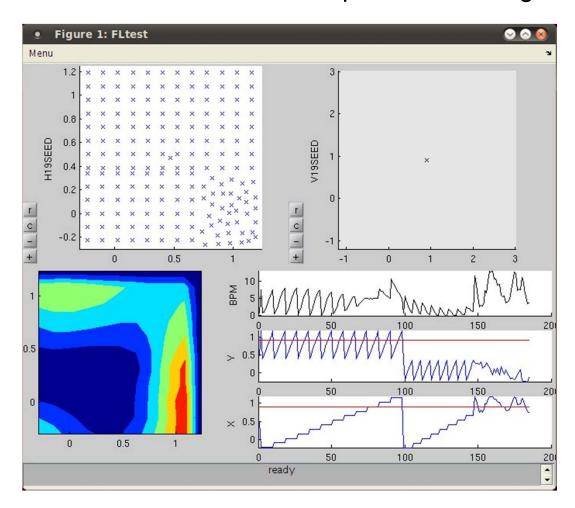


- With gap-variation at sFLASH
- With energy ramping

## Undulator Launch Optimization



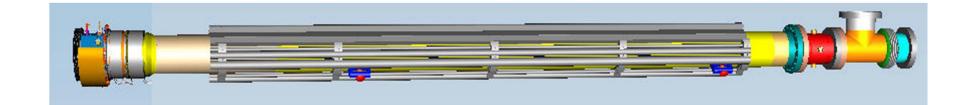
Automatic orbit launch scan for optimal SASE signal



### Performance State Machine



- Stabilize and optimize machine performance
  - Test region: dump



• Final goal: SASE optimization