für Plasmaphysik

TORBEAM for ITM

Emanuele Poli

ITM General Meeting, Garching, Sept. 12-16, 2011

IPP Max-Planck-Insititut

TORBEAM: Physical Model

TORBEAM is a beam tracing code for **Electron-Cyclotron waves**

Propagation retains diffraction through paraxial expansion, linear model for absorption, adjoint method for current drive including momentum conservation (N. Marushchenko; first benchmarks passed)



Fast version (runtime < 30 ms) for real-time applications under implementation</p> in the AUG control loop (M. Reich)



TORBEAM: ITM Status

- TORBEAM runs under Kepler for UAL 4.08b (output cpo changed) correspondingly: from coreprof to waves)
- Tested in Thomas's workflow (switch with GRAY)
- Part of the input still supplied as namelist
- ITM benchmark with other EC codes under way



