Development of a Semi-Lagrangian Gyrokinetic Simulation Code S. BRUNNER, T. M. TRAN, X. LAPILLONNE, M. BRUNETTI, CRPP — A new grid-based, semi-Lagrangian code is being developed at the CRPP for solving the gyrokinetic equation in tokamak geometry. This development is based on the experience gained with the CYGNE project [M. Brunetti *et. al*, Comp. Phys. Comm. **163**, 1 (2004)], which solved the electrostatic drift-kinetic equations in a cylindrical system using a semi-Lagrangian approach. This new code makes use of efficient and flexible software modules, in particular for handling interpolations essential to the semi-Lagrangian method, as well as for practical handling of domain decomposition on parallel platforms. Preliminary results in reduced geometry, in particular slab and cylindrical, will be presented.

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	Prefer Oral Session
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