MAFOT: a field line and particle drift orbit tracer

MAFOT can calculate:

- Poincaré plots
- Connection length
- Penetration depth
- Manifolds of separatrix or island chains
- full 3-D orbits
- B-fields outside of VMEC & SIESTA last closed surface

in tokamaks:
DIII-D, ITER, NSTX, MAST & JET

in:
- Poloidal cross-sections: (R,Z) & (θ,ψ) coordinates
- Footprints on divertor targets

for:
- magnetic field lines
- relativistic particles in a guiding center drift approx.

with:
- RMP vacuum fields of coils
- M3D-C1 plasma response
- VMEC & SIESTA B-fields
- arbitrary individual current filaments

Control GUI available

DIII-D NATIONAL FUSION FACILITY SAN DIEGO

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