W7-X aims at quasi-steady-state operation with an island-divertor.
- MHD-equilibrium of VMEC gives $\vec{B}$ in plasma, not in entire vacuum vessel.
- EXTENDER allows this but $\text{div}B$-violation at interface (difficult for EMC3-transp. simul.).
- Combination of VMEC-, EXTENDER- & Biot-Savart-fields reduces $\text{div}B$-violation to acceptable level.
- Combination breaks VMEC-flux surface assumption.
- First assessment of change of magnetic topology of boundary with pressure and toroidal current.
  (example: connection length, Poincaré-plot and strike lines for high-mirror conf., $t_b=5/5$ ($\rightarrow$ 5 islands)).

Fields can be calculated easily.
- Implemented as web-service for W7-X at IPP.
  VMEC=>EXTENDER=>field-line tracing/diffusion.
- Investigations of high-performance scenarios for quasi-steady-state operation with divertor compatibility.
- Comparison with HINT-code started.