The upgraded and baffled TCV – a testbed EPFL for alternative divertors and model validation

- TCV's removable divertor baffles increase divertor neutral pressure and facilitate access to detachment in L- and H-mode
 - Measured V_{pl} with predicted neg. region in Rev. B
 - φ [V]
- SOLPS drift simulations correctly predict key

features (relative changes with baffles, nature of parallel currents, potential structure,...); Remaining quantitative differences identified

Expected reduction of detachment threshold at large target radius (Super-X) partly recovered with baffles



1.5

 $\times 10^{20}$

C. Theiler | 28th IAEA FEC | 14/5/2021

Swiss

Plasma Center



