EUROfusion

Topic 21: AUG experiment analsysis meeting

N. Vianello and V. Naulin for the Topic 21 Scientific Team

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Summary of the campaigns

- ✓ L-Mode experiment, CW 17.
  1. Performed similar density ramps in an I_p scan at constant q_{95}
  2. Performed similar density ramps in an I_p scan at constant B_t

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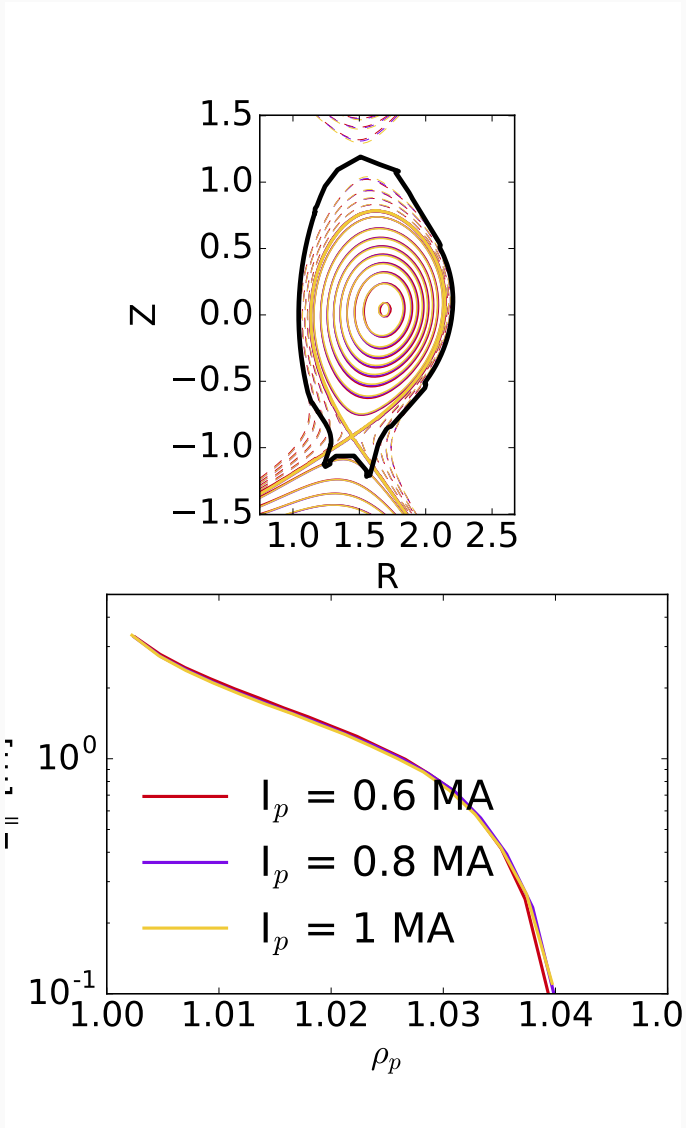
- ✓ H-Mode experiment, CW 21.
  1. Compare divertor/midplane fueling effect on filamentary transport and profiles without cryo-pumps
  2. Compare profiles with the same fueling with/without cryopums
  3. Determine an H-Mode with the cryopumps matching similar divertor pressure and SOL profiles

L-Mode analysis: I_p scan at constant q_{95}



- ✓ We matched correctly the shape and the $L_{||}$ here shown from outer divertor plate up to X-point

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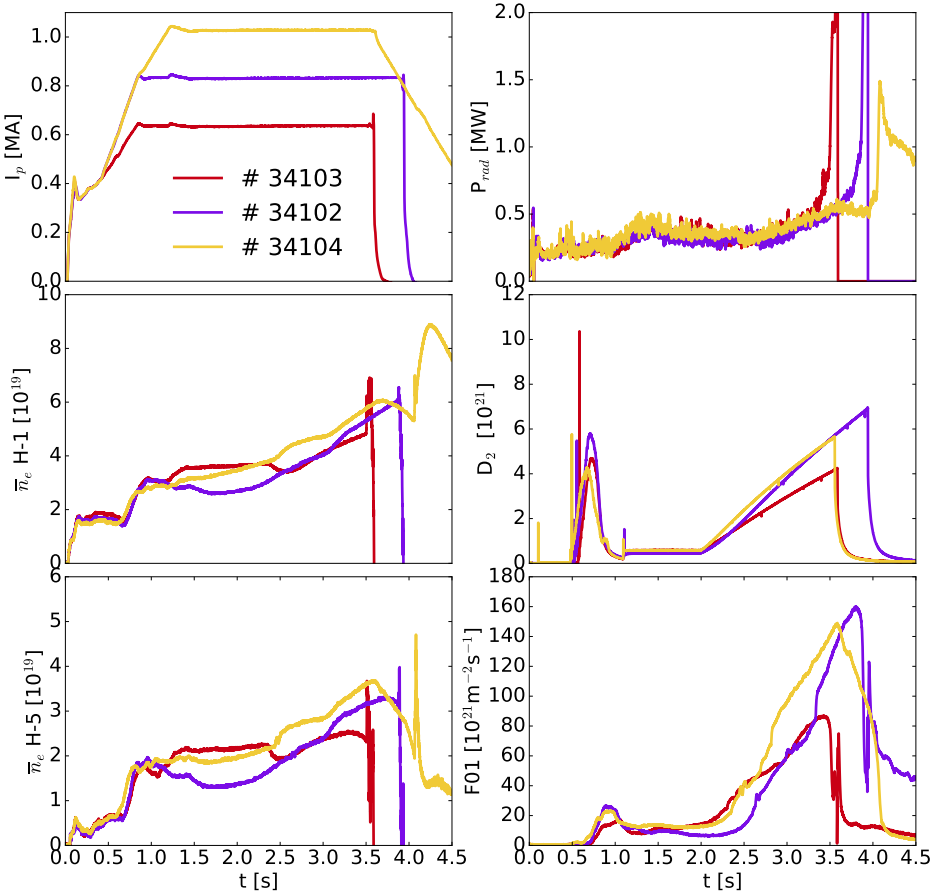

- ✓ The scan was performed with similar puffing rate (0.8-1 MA) whereas we reduced it at lower current to avoid early disruption
- ✓ We have comparable edge density and divertor neutral pressure

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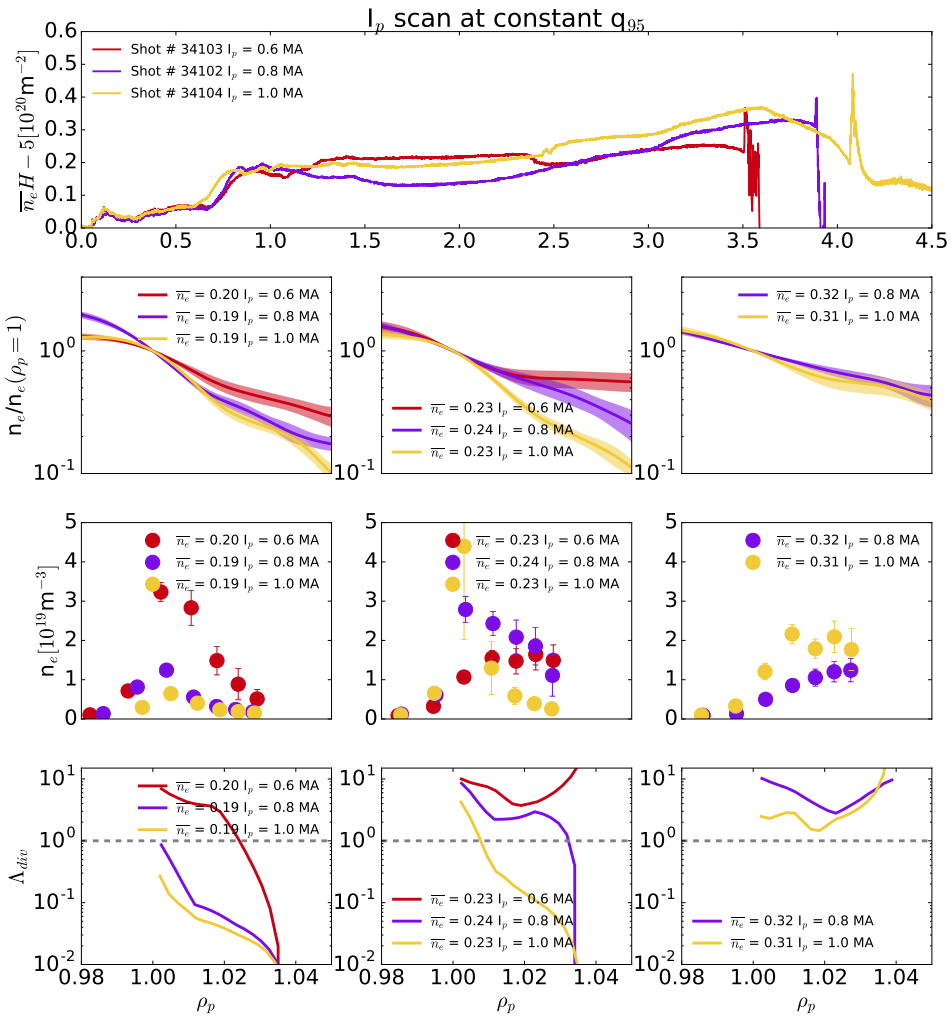

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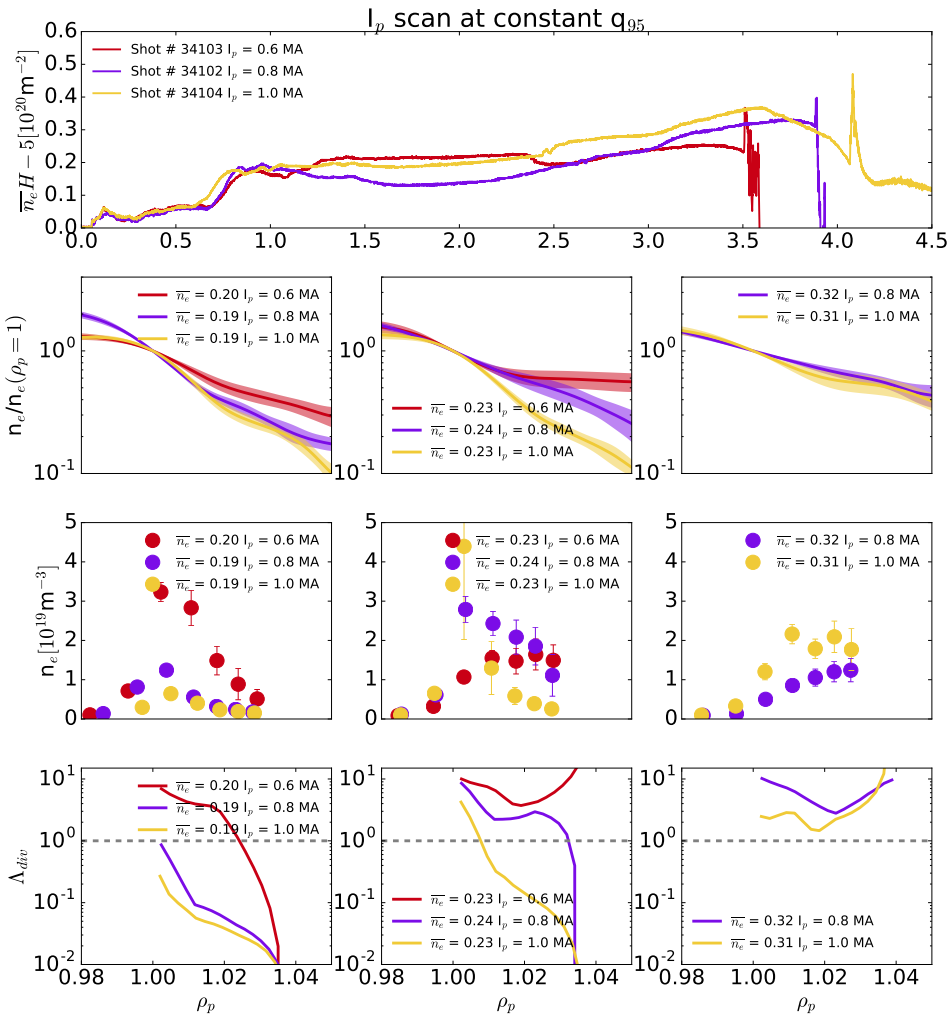

- ✓ At comparable edge density Upstream profiles are different with the tendency to develop shoulder easier at lower current
- ✓ Still need to provide detail evolution of edge profiles as a function of Λ_{div} which are different at different current although same $L_{||}$

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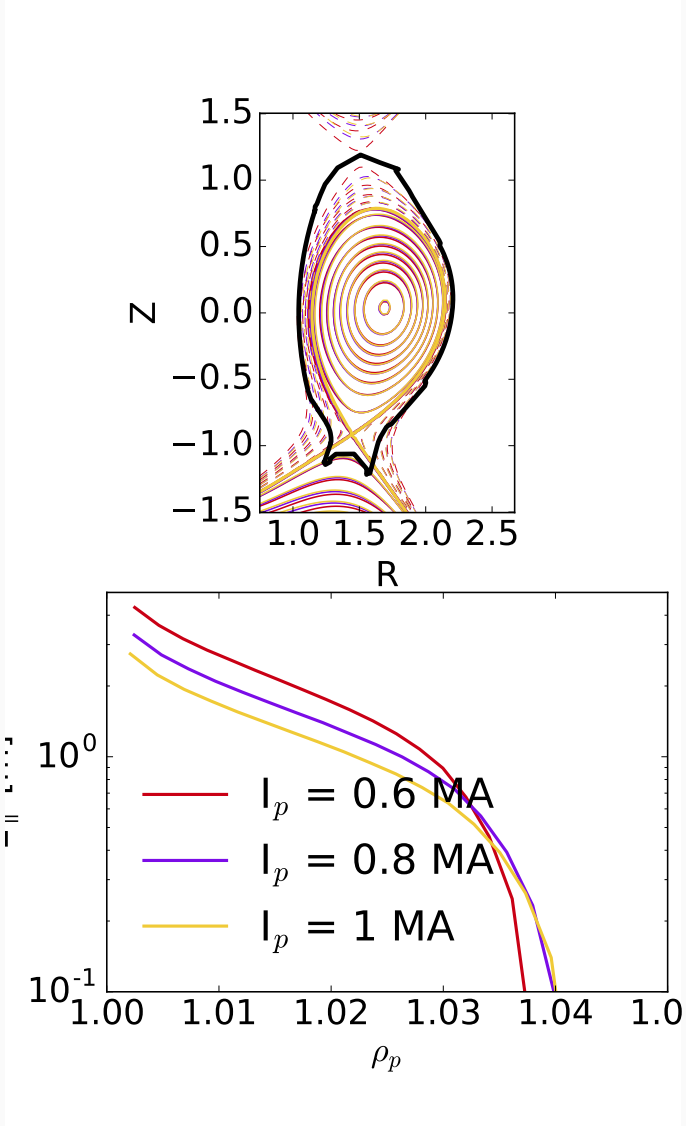

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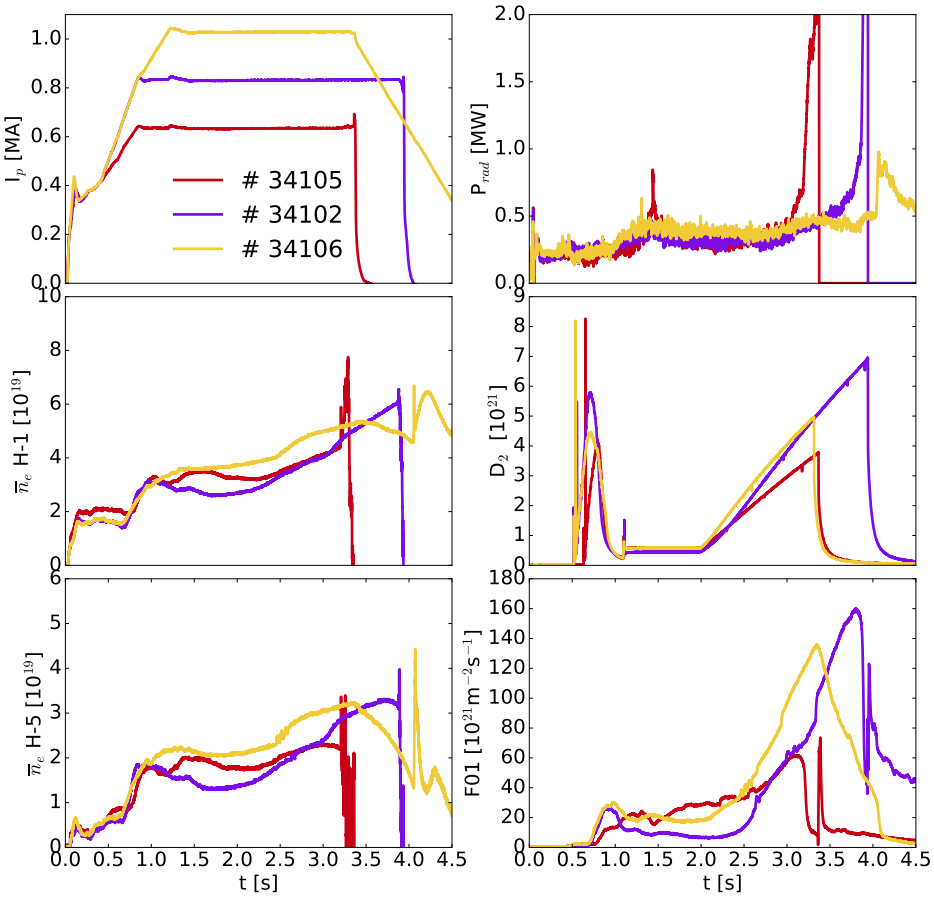

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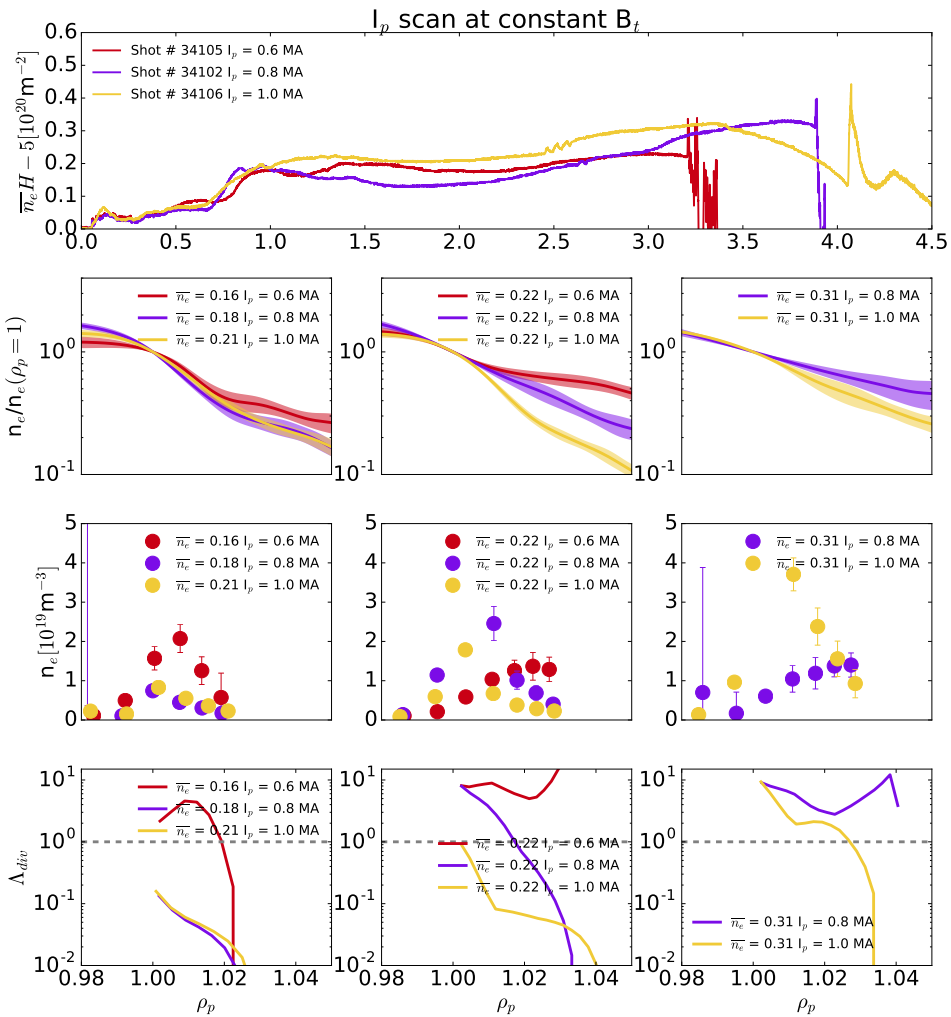

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