Electron temperature peaking on JET is dominated by the value of \( \tau = \frac{Z_{\text{eff}} T_e}{T_i} \), which is a key player for ETG instabilities.

A massive multi-scale simulation, still ongoing, also gives indications of a non-negligible ETG flux in JET plasmas.

These results are important for ITER which will be dominated by electron heating.

Non-linear GK simulations indicate that ITG/TEM are not enough to account for the experimental electron heat flux and stiffness. ETGs single scale simulations seem to provide the missing flux.