

# WHAT ARE THE TMC SIMPLE FORMULA NEW PREDICTIONS ?

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- ◆ The TMC simple formula is not just an approximation in some particular cases of a more general TMC theory : It predicts a new mechanism

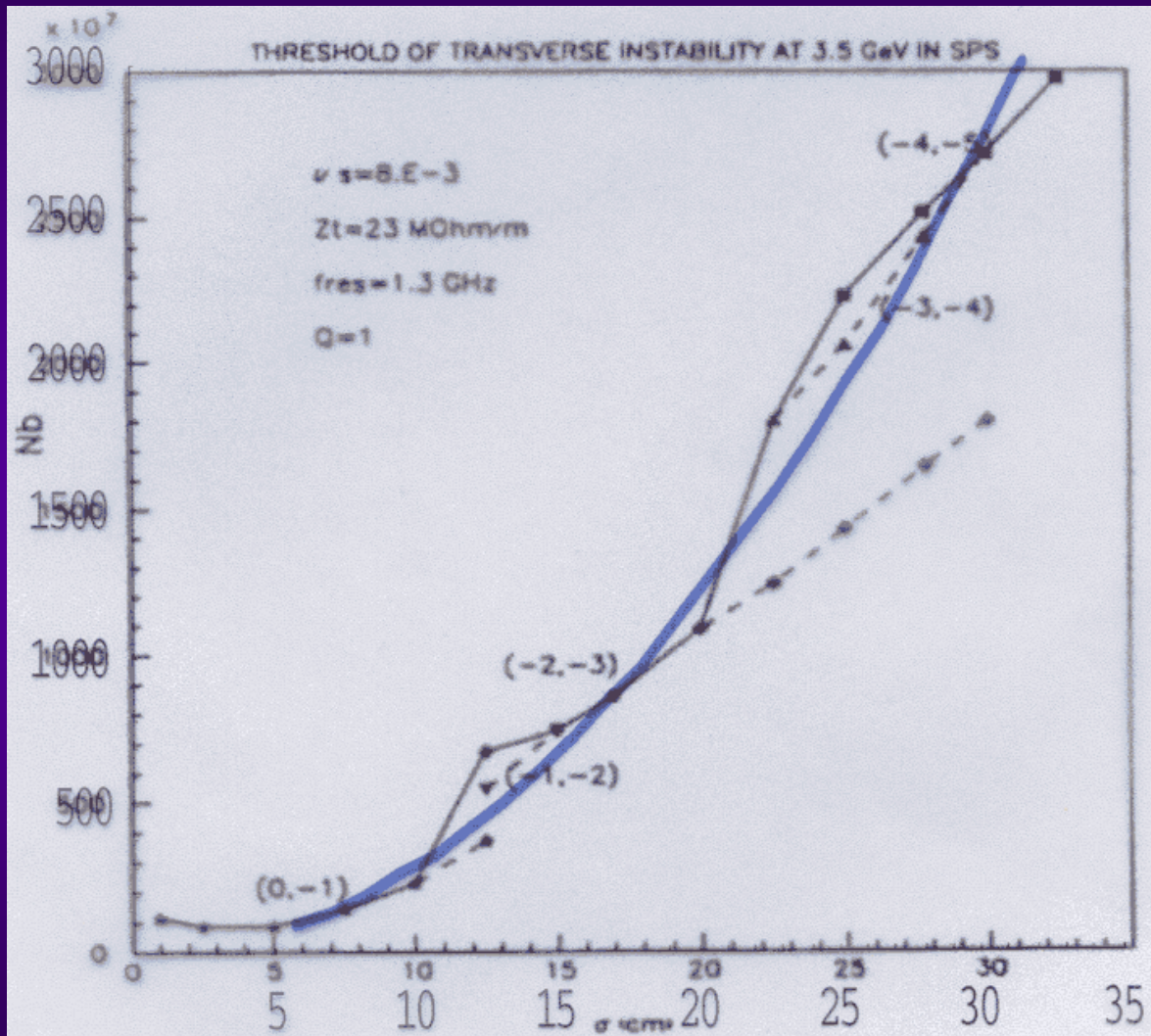
- ◆ Validity of this theory :

$$\tau_b \geq \sim \frac{1}{2 f_r} \quad Q \approx 1$$

(1) THE TMC INSTABILITY DOES NOT DEPEND ON  $f_s$  BUT  
ON  $\varepsilon_l$  !

(2) THE TMC INTENSITY THRESHOLD INCREASES WITH  $\xi$

# (1) is in fact hidden in the simulation results of Elena Shaposhnikova with MOSES



If one considers that  $\tau_b$  is a good fitting

$$\tau_b^2$$

$$\Rightarrow N_b^{th} \propto f_s \tau_b^2$$

$$\Rightarrow N_b^{th} \propto |\eta| \epsilon_l$$

$f_s$  disappears and thus also the notion of modes !

**(2) is also predicted by Perevedentsev**

**⇒ To be checked with MOSES...**