

Fig. 3. Growth rate of a turbulent spot close to the phase transition. Square of the dimensionless growth rate of turbulent spots plotted as a function of Re close to the phase transition in pipe (A), channel (B) and square duct (C). The line follows $G \propto (Re - Re_C)^{1/2}$ which yields the following critical numbers: $Re_C^{pipe} = 2550$, $Re_C^{channel} = 1480$ and $Re_C^{duct} = 2250$. Note that for the channel non-linear saturation sets in much earlier than in the other two cases.