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Direct simulation of the zero-pressure-gradient boundary layer up to $Re_{\theta} = 6000^1$ JUAN A. SILLERO, GUILLEM BORRELL, AYSE G. GUN-GOR, JAVIER JIMÉNEZ, U. Politécnica Madrid, ROBERT D. MOSER, TODD A. OLIVER, U. Texas Austin — Preliminary results are presented from a direct simulation of the zero-pressure-gradient turbulent boundary layer in the range $Re_{\theta} = 2500$ – 6000, approximately matching channels at $Re_{\tau} = 2000$. Special emphasis is put on the effect of enforcing inflow conditions at a relatively-high Reynolds number, and on their influence on the streamwise development of the mean and fluctuating flow properties.

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