Abstract Submitted
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Turbulence and secondary motions in square duct flow[1] SERGIO PIROZZOLI, Sapienza University of Rome, DAVIDE MODESTI, CNAM, Paris, PAOLO ORLANDI, Sapienza University of Rome, FRANCESCO GRASSO, CNAM, Paris — We study turbulent flows in pressure-driven ducts with square cross-section through DNS up to $Re_\tau \approx 1050$. Numerical simulations are carried out over extremely long integration times to get adequate convergence of the flow statistics, and specifically high-fidelity representation of the secondary motions which arise. The intensity of the latter is found to be in the order of 1-2

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