

Publications List of Ramis Örlü

The *h*-index is 29 and the citation data — given in square brackets — has been obtained from [Google Scholar](#) (July 4th, 2020).

A Articles in Refereed Journals

1. Chin, C., Vinuesa, R., **Örlü, R.**, Cardesa, J. I., Noorani, A., Chong, M. S. and Schlatter, P. (2020) Back-flow events under the effect of secondary flow of Prandtl's first kind. *Phys. Rev. Fluids* (accepted)
2. Dróżdż, A., Elsner, W., Niegodajew, P., Vinuesa, R., **Örlü, R.** and Schlatter, P. (2020) A description of turbulence intensity profiles for boundary layers with adverse pressure gradient. *Eur. J. Fluid Mech. B/Fluids* (accepted)
3. **Örlü, R.** and Vinuesa, R. (2020) Instantaneous wall-shear-stress measurements: advances and application to near-wall extreme events. *Meas. Sci. Technol.* (accepted)
4. Samie, M., Baars, W. J., Rouhi, A., Schlatter, P., **Örlü, R.**, Marusic, I. and Hutchins, N. (2020) Near wall coherence in wall-bounded flows and implications for flow control. *Int. J. Heat Fluid Flow* (accepted)
5. Sanmiguel Vila, C., Vinuesa, R., Discetti, S., Iapiro, A., Schlatter, P. and **Örlü, R.** (2020) Separating adverse-pressure-gradient and Reynolds-number effects in turbulent boundary layers. *Phys. Rev. Fluids* **5**, 064609. DOI: [10.1103/PhysRevFluids.5.064609](https://doi.org/10.1103/PhysRevFluids.5.064609).
6. Canton, J., Rinaldi, E., **Örlü, R.** and Schlatter, P. (2020) Critical point for bifurcation cascades and featureless turbulence. *Phys. Rev. Lett.* **124**, 014501. DOI: [10.1103/PhysRevLett.124.014501](https://doi.org/10.1103/PhysRevLett.124.014501). [4]
7. Sanmiguel Vila, C., Vinuesa, R., Discetti, S., Iapiro, A., Schlatter, P. and **Örlü, R.** (2020) Experimental realisation of near-equilibrium adverse-pressure-gradient turbulent boundary layers. *Exp. Therm. Fluid Sci.* **112**, 109975. DOI: [10.1016/j.expthermflusci.2019.109975](https://doi.org/10.1016/j.expthermflusci.2019.109975). [2]
8. Borodulin, V. I., Ivanov, A. V., Kachanov, Y. S., Mischenko, D. A., **Örlü, R.**, Hanifi, A. and Hein, S. (2019) Experimental and theoretical study of swept-wing boundary-layer instabilities. Three-Dimensional Tollmien-Schlichting instability. *Phys. Fluids* **31**, 114104. DOI: [10.1063/1.5125812](https://doi.org/10.1063/1.5125812)

9. Zanoun, E.-S., Egbers, C., **Örlü, R.**, Fiorini, T., Bellani, G. and Talamelli, A. (2019) Experimental evaluation of the mean momentum and kinetic energy balance equations in turbulent pipe flows at high Reynolds number. *J. Turbulence* **20**, 285–299. DOI: [10.1080/14685248.2019.1628968](https://doi.org/10.1080/14685248.2019.1628968). [1]
10. Güemes, A., Sanmiguel Vila, C., **Örlü, R.**, Vinuesa, R., Schlatter, P., Iapiro, A. and Discetti, S. (2019) Flow organization in the wake of a rib in a turbulent boundary layer with pressure gradient. *Exp. Therm. Fluid Sci.* **108**, 115–124. DOI: [10.1016/j.expthermflusci.2019.05.022](https://doi.org/10.1016/j.expthermflusci.2019.05.022). [1]
11. Borodulin, V. I., Ivanov, A. V. Kachanov, Y. S., Mischenko, D. A., **Örlü, R.**, Hanifi, A. and Hein, S. (2019) Experimental and theoretical study of swept-wing boundary layer instabilities. Unsteady crossflow instability. *Phys. Fluids* **31**, 064101. DOI: [10.1063/1.5094609](https://doi.org/10.1063/1.5094609). [2]
12. Discetti, S., Bellani, G., **Örlü, R.**, Serpieri, J., Sanmiguel Vila, C., Raiola, M., Zheng, X. Mascotelli, L., Talamelli, A. and Iapiro, A. (2019) Characterization of very-large-scale motions in high-Re pipe flows. *Exp. Therm. Fluid Sci.* **104**, 1–8. DOI: [10.1016/j.expthermflusci.2019.02.001](https://doi.org/10.1016/j.expthermflusci.2019.02.001). [6]
13. Mallor, F., Raiola, M., Sanmiguel Vila, C., **Örlü, R.**, Discetti, S. and Iapiro, S. (2019) Modal decomposition of flow fields and convective heat transfer maps: An application to wall-proximity square ribs. *Exp. Therm. Fluid Sci.* **102**, 517–527. DOI: [10.1016/j.expthermflusci.2018.12.023](https://doi.org/10.1016/j.expthermflusci.2018.12.023). [7]
14. Dogan, E., **Örlü, R.**, Gatti, D., Vinuesa, R. and Schlatter, P. (2019) Quantification of amplitude modulation in wall-bounded turbulence. *Fluid Dyn. Res.* **51**, 011408. DOI: [10.1088/1873-7005/aaca81](https://doi.org/10.1088/1873-7005/aaca81). [15]
15. Wang, Z., **Örlü, R.**, Schlatter, P. and Chung, Y. M. (2018) Direct numerical simulation of a turbulent 90° bend pipe flow. *Int. J. Heat Fluid Flow* **73**, 199–208. DOI: [10.1016/j.ijheatfluidflow.2018.08.003](https://doi.org/10.1016/j.ijheatfluidflow.2018.08.003). [14]
16. Vernet, J. A., **Örlü, R.** and Alfredsson, P. H. (2018) Flow separation control by dielectric barrier discharge plasma actuation via pulsed momentum injection. *AIP Advances* **8**, 075229. DOI: [10.1063/1.5037770](https://doi.org/10.1063/1.5037770). [7]
17. Alfredsson, P. H. and. **Örlü, R.** (2018) Large-Eddy BreakUp devices – a 40 years perspective from a Stockholm horizon. *Flow Turbul. Combust.* **100**, 877–888. DOI: [10.1007/s10494-018-9908-4](https://doi.org/10.1007/s10494-018-9908-4). [5]
18. Vernet, J.A., **Örlü, R.**, Söderblom, D., Elofsson, P. and Alfredsson, P. H. (2018) Plasma streamwise vortex generators for flow separation control on trucks. A proof-of-concept experiment. *Flow Turbul. Combust.* **100**, 1101–1109. DOI: [10.1007/s10494-018-9891-9](https://doi.org/10.1007/s10494-018-9891-9). [12]

19. Hufnagel, L., Canton, J., **Örlü, R.**, Marin, O., Merzari, E. and Schlatter, P. (2018) The three-dimensional structure of swirl-switching in bent pipe flow. *J. Fluid Mech.* **835**, 86–101. DOI: [10.1017/jfm.2017.749](https://doi.org/10.1017/jfm.2017.749). [16]
20. Vernet, J. A., **Örlü, R.** and Alfredsson, P. H. (2018) Flow separation control behind a cylindrical bump using dielectric-barrier-discharge vortex generator plasma actuators. *J. Fluid Mech.* **835**, 852–879. DOI: [10.1017/jfm.2017.773](https://doi.org/10.1017/jfm.2017.773). [9]
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22. Sanmiguel Vila, C., **Örlü, R.**, Vinuesa, R., Schlatter, P., Iapiro, A. and Discetti, S. (2017) Adverse-pressure-gradient effects on turbulent boundary layers: statistics and flow-field organization. *Flow Turbul. Combust.* **99**, 589–612. DOI: [10.1007/s10494-017-9869-z](https://doi.org/10.1007/s10494-017-9869-z). [29]
23. Chin, C., **Örlü, R.**, Schlatter, P., Monty, J., and Hutchins, N., (2017) Influence of a large-eddy-breakup-device on the turbulent interface of boundary layers. *Flow Turbul. Combust.* **99**, 823–835. DOI: [10.1007/s10494-017-9861-7](https://doi.org/10.1007/s10494-017-9861-7). [2]
24. Ikeya, Y., **Örlü, R.**, Fukagata, K., and Alfredsson, P. H. (2017) Towards a theoretical model of heat transfer for hot-wire anemometry close to solid walls. *Int. J. Heat Fluid Flow* **68**, 248–256. DOI: [10.1016/j.ijheatfluidflow.2017.09.002](https://doi.org/10.1016/j.ijheatfluidflow.2017.09.002). [8]
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