## Accepted Manuscript

Visibility graph analysis of wall turbulence time-series

Giovanni Iacobello, Stefania Scarsoglio, Luca Ridolfi



To appear in: *Physics Letters A* 

Received date:19 June 2017Revised date:15 September 2017Accepted date:15 October 2017



Please cite this article in press as: G. Iacobello et al., Visibility graph analysis of wall turbulence time-series, *Phys. Lett. A* (2017), https://doi.org/10.1016/j.physleta.2017.10.027

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

## Highlights

- We apply the visibility algorithm to analyze turbulent channel flow time-series.
- Temporal structures of the series are inferred by the network global metrics.
- Peaks and irregularities of time-series are highlighted by the visibility networks.
- Different flow dynamics along the wall-normal direction are captured by the metrics.
- This method represents a promising tool for inhomogeneous turbulent flows analyses.

Download English Version:

https://daneshyari.com/en/article/8204284

Download Persian Version:

https://daneshyari.com/article/8204284

Daneshyari.com