

Meet the Editors

KATSUHIRO NISHINARI



Katsuhiko Nishinari is a professor at the Research Center for Advanced Science & Technology, University of Tokyo, Japan. Prof. Nishinari received a Ph.D degree in aerospace engineering from the University of Tokyo, Japan, in 1995. He became a professor at the University of Tokyo in 2009. He was a visiting scientist at Institute for Physics, University of Cologne, Germany in 2002-2003. He is a member of Physical Society of Japan, Applied Mathematical Society of Japan and Japan Society of Mechanical Engineering, and an editor of the *Journal of cellular automaton*. He organizes a number of international conferences including ACRI, C&CA and TGF.

Prof. Nishinari works on interdisciplinary topics in applied mathematics, fluid dynamics, and statistical physics. His research interests are in “Jamology”, the field of science established by himself in 2004. “Jamology” is an

interdisciplinary research on transportation and jamming phenomena (vehicular traffic, pedestrian motion, queue network and supply chain, etc.) by using applied mathematics.

He has published over hundred papers in leading international journals, and wrote several books about traffic jams and applied mathematics. Latest publication list is available at http://park.itc.u-tokyo.ac.jp/tknishi/info_e.html. His research on traffic jam is selected as a big project of PRESTO, Japan Science and Technology Agency in 2007. He has won awards for his work including “Young Investigators Award of the Japan Society of Mechanical Engineers”(1998), “The 23th Scientific Publication Award in Japan by the book “Jamology”(in Japanese)” (2007), and NISTEP Award 2013 from National Institute of Science and Technology Policy.

FIVE SELECTED PUBLICATIONS

- [1] Y. Taniguchi, R. Nishi, T. Ezaki, K. Nishinari, “Jam-absorption driving with a car-following model”, *Physica A* (2015), pp. 304-315
- [2] T. Ezaki, K. Nishinari, “Potential global jamming transition in aviation networks”, *Phys. Rev. E*, 90, 022807 (2014)
- [3] T. Masuda, K. Nishinari, A. Schadschneider, “Critical Bottleneck Size for Jamless Particle Flows in Two Dimensions”, *Phys. Rev. Lett.* Vol. 112(2014) P138701
- [4] S. Tadaki, M. Kikuchi, M. Fukui, A. Nakayama, K. Nishinari, A. Shibata, Y. Sugiyama, T. Yosida, S. Yukawa, “Phase transition in traffic jam experiment on a circuit”, *New J. Phys.* Vol. 15 (2013) P103034
- [5] A. John, A. Schadschneider, D. Chowdhury, K. Nishinari, “Traffic-like Collective Movement of Ants on Trails: Absence of a Jammed Phase”, *Phys.Rev.Lett.*, Vol. 102 (2009) p.108001