Citation for Tim Austin. The Ostrowski Prize for 2021 is awarded to Tim Austin for his outstanding work in a remarkably broad array of fields, including probability theory, ergodic theory and dynamics, combinatorics, operator algebras, group cohomology, and metric geometry. He made several breakthroughs, solving old standing problems, while at the same time making deep theory-building contributions.

The main justification for this award is Tim Austin's recent groundbreaking solution of the weak Pinsker conjecture in ergodic theory. Ever since the 1970s, when this conjecture was formulated by Thouvenot, it has been recognized as the most important open problem in Bernoulli isomorphism theory. Austin's result, solving the problem in the affirmative, states that an arbitrary measure preserving transformation decomposes as a direct product of a Bernoulli shift and a low-entropy transformation. This is the first general structure theorem in entropy theory, a spectacular result which is broadly regarded as the most important development in this subject in the last 40 years. While this is a remarkable achievement in dynamics, the main tool is an equally formidable achievement from the point of view of analysis. In order to prove it, Austin established a remarkable concentration of measure result – a new way to decompose measures on high-dimensional products into a controlled number of parts that exhibit concentration of measure.

Tim Austin is a British mathematician, born in 1983 in London, UK. He finished his PhD in mathematics at the University of California in Los Angeles in 2010. After holding positions at Brown University, Microsoft Research, and the Courant Institute of Mathematical Sciences, he has got a professorship at the University of California in Los Angeles in 2017.

The Ostrowski Foundation was created by Alexander M. Ostrowski who was for many years a professor at the University of Basel. He left his entire estate to the foundation and stipulated that the income should provide a prize for outstanding achievements in mathematics. The prize is awarded every other year and is currently 100,000 Swiss francs.