HABILITATIONSVORTRAG

Mittwoch, den 5. Nov. 2025 - 14:00 Uhr
Tommaso Russo

Seminar-raum 13 Architektur-gebäude	**Forschungsvortrag und Diskussion:**
	„Packings and tilings: from Flatlandia to infinite dimensions"
	Packing and tiling problems have been considered by several mathematicians since the antiquity; just to mention some famous names, by Euclid, Aristotle, Kepler, Gauss, Lagrange. For instance, what is nowadays known as Kepler's problem originated as the problem of finding the optimal way to stack cannonballs on a ship. They are still very relevant problems in contemporary mathematics, due to their applications, e.g., in self-correcting codes, cryptography, phase transitions, and granular materials.
	After a very brief description of some results in $\mathbf{R}^n$, I will move on to two recent constructions of tilings in infinite dimension, based on joint work (partially in progress) with Carlo De Bernardi and Jacopo Somaglia. I will only explain the basic geometric ideas at an informal level; I promise many drawings, no formulas, and a talk accessible to (and taylor-made for) students as well.