Boğaziçi Math Seminar

Open Books and Singular Fibrations in Higher-Dimensional Contact Topology

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Abstract:

A key approach to studying a topological manifold is to decompose it into simpler pieces via fibrations. An important example is an open book decomposition, which presents a manifold as pages glued together along a common binding. Open books offer a powerful framework for analyzing special odd-dimensional differentiable manifolds, contact manifolds, that shifts the study of these geometric objects to a topological perspective. In this talk, I will describe how singular symplectic fibrations give rise to open book decompositions and how this perspective can be used to systematically produce and study higher-dimensional contact manifolds and their symplectic fillings.

Date : Wednesday, March 4, 2026
Time: 13:30
Place: TB 130, Boğaziçi University