▶ BRICE HALIMI, *Geometrizing Kripke modal semantics.*
Université Paris Cité & SPHERE.
*E-mail*: brice.halimi@u-paris.fr.

Kripke semantics for propositional modal logic is based on the notion of accessibility between possible worlds. The purpose of my talk is to take the latter notion literally, i.e., as indicating the existence of a path between two worlds, and thus to geometrize Kripke semantics by considering the space underlying the collection of all possible worlds as an important semantical feature in its own right. The resulting new modal semantics is worked out in a setting coming from Riemannian geometry, where Kripke semantics is shown to correspond to a special case (namely, the discrete one), and thus geometrization to amount to a generalization. Several completeness results, established between variants of well-known modal systems and certain geometric-metric properties, illustrate the import of the new framework.