▸ SANDRA MÜLLER, *Universally Baire Sets and the Inner Model Program.*
Institute of Discrete Mathematics and Geometry, TU Wien, Wiedner Hauptstrasse 8-10/104, 1040 Vienna, Austria.
E-mail: sandra.mueller@tuwien.ac.at.
URL Address: https://dmg.tuwien.ac.at/sandramueller/.

Universally Baire sets originate in work of Schilling and Vaught, and they were first systematically studied by Feng, Magidor, and Woodin. Since then they play a prominent role in many areas of set theory. We will discuss recent progress on their relationship to the Inner Model Program. First, we will outline the resolution of Sargsyan's Conjecture on the large cardinal strength of determinacy when all sets are universally Baire. The second part of the talk will focus on sealing the theory of the universally Baire sets. Woodin showed in his famous Sealing Theorem that in the presence of a proper class of Woodin cardinals Sealing, a generic absoluteness principle for the theory of the universally Baire sets of reals, holds after collapsing a supercompact cardinal. We will outline the importance of Sealing and discuss a new and stationary-tower-free proof of Woodin's Sealing Theorem that is based on Sargsyan's and Trang's proof of Sealing from iterability. The second part is joint work with Grigor Sargsyan and Bartosz Wcisło.