Abstract:
"Knots and their groups are a traditional topic of geometric topology. In this talk, I will survey recent developments that originate in coloring invariants and the classification of knots in terms of algebraic structures that conceptualize these invariants (and much more). As a result, knots can be identified with their invariants, embedding the theory into an entirely different universe. This point of view allows us to do knot theory without (explicitly referring to) knots, rephrasing old results and discovering new ones."