Abstract

In this talk, I will introduce some remarkable advances till 2023/2024 in modular representations of Lie algebras of reductive groups in positive characteristic. The emphasis will be on Lusztig's series of conjectures on irreducible modules and solutions. I will also introduce our recent works in this topic jointly with Y. Li-Y.Yao, with B.Liu-X.Wen, and with Y.Zeng, respectively.