

1154-43-2654 **Ehssan Khanmohammadi*** (khanmohe@union.edu). *Some harmonic analysis problems arising from Kirillov's character formula.*

In 1960s Kirillov proposed an elegant formula for the character of an irreducible representation of a Lie group that fitted nicely into his geometric quantization program. Kirillov's formula is striking for its simplicity and generality, but as is well known, it can fail to correctly express the character in a variety of ways. In this talk, I take an operator-algebraic approach to understanding this issue better, and present some results and problems that originate from my study of Kirillov's character formula. (Received September 17, 2019)