

On representations of the fundamental group of the whitehead link complement in $PU(2,1)$

P. Will

(University of Illinois at Urbana-Champaign, USA)

In this talk, I will discuss representations of the complement of the Whitehead link in $PU(2,1)$, the isometry group of the complex hyperbolic plane. Using trace coordinates on the representation variety of the free group of rank two, I will obtain a family of non-faithful representations, containing the one obtained by Rich Schwartz which provides a spherical CR uniformisation of the complement of the Whitehead link. I will describe another representation in this family that provides another similar structure on the complement of the Whitehead link, non conjugate to Schwartz's one. The latter result is joint work with John Parker.