1061-57-146 **Melissa Macasieb** and **Kathleen Petersen*** (petersen@math.fsu.edu), Department of Mathematics, Florida State University, 1017 Academic Way, Room 208, Tallahassee, FL 32306, and **Ronald van Luijk**. *Character Varieties of a Family of Two-Bridge Knots.*

Explicit models for character varieties of hyperbolic 3-manifolds are, in general, very difficult to compute. Character varieties encapsulate much important data about the original manifold. I will discuss the construction of explicit models for the PSL(2,C) and SL(2,C) character varieties of complements of a family of two-bridge knots and discuss some consequences of this work. This family of knots contains the twist knots and is the first infinite family of knots for which explicit models have been constructed. (Received April 12, 2010)