LENS SPACE SURGERIES ON KNOTS IN THE 3-SPHERE

MICHAEL J. WILLIAMS UC DAVIS

An open problem in 3-manifolds and knot theory is to classify knots in the 3-sphere which admit lens space Dehn surgeries. It is conjectured that only certain tunnel number one knots, the so-called "Berge knots", admit lens space surgeries. Starting with the definition of Dehn surgery, I will discuss the conjectural picture for lens space surgeries and then give a sketch of my research on this conjecture.