

Dehn surgeries on a 2-component link in S^3

We generalize the technique of intersection graphs to study the complement problem for 2-component links in S^3 .

The 2-component links in S^3 are not determined by their complement. In particular, they can produce S^3 by a non-trivial Dehn surgery. All the classical examples of 2-component links in S^3 which produce S^3 by a non-trivial surgery verify a certain condition of triviality. We are interested in the others. We will study the two distances between the surgery-slopes producing S^3 . In particular, we will show that one of these two distances is bounded, the bound depending on the link.