1078-54-350   **Kai Ishihara***, Department of Mathematics, Imperial College London, 180 Queens Gate South Kensington, London, England, and **Dorothy Buck**. *On nullification distance.*

The action of some site-specific recombinases can be modeled by a band surgery. Then we can consider the distance between two links in terms of coherent band surgeries. That is called nullification distance. In particular, the distance from an oriented link to an unlink is called the nullification number. Ernst-Montemayor-Stasiak enumerated the nullification number for all knots up to 9 crossings. The purpose of this talk is to give the table of the nullification distances between pairs of knots up to 7 crossings and two component links up to 6 crossings. We also discuss a relation between band surgery and rational tangle surgery. (Received December 13, 2011)