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Abstracts of Short Communications and Posters

Section:

6. Topology

1991 MS Classification: 57
Kearton, Cherry, University of Durham, England:
Alexander ideals of classical knots.
A polynomial $f(t) \in Z\left[t, t^{-1}\right]$ is the i th Alexander polynomial of some classical knot if and only if $f(1) = \pm 1$ and $f\left(t^{-1}\right) = t^{2r} f(t)$ for some $r \in Z$. This result was proved by H. Seifert in 1934. In joint work with S. M. J. Wilson, I show that an ideal $E(t)$ of $Z\left[t, t^{-1}\right]$ is the i th Alexander ideal of some classical knot, for some i, if and only if $E(1) = Z$ and $E\left(t^{-1}\right) = E(t)$.