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PETER J. OLVER
UNIVERSITY OF MINNESOTA

BULLETIN (New Series) OF THE
AMERICAN MATHEMATICAL SOCIETY
Volume 19, Number 2, October 1988

0273-0979/88 $1.00 + $.25 per page

Knots, by Gerhard Burde and Heiner Zieschang. DeGruyter Studies in Mathematics, vol. 5, Walter DeGruyter, Berlin, New York, 1985, x+399 pp., $49.95. ISBN 0-89925-014-9

On knots, by Louis H. Kauffman. Annals of Mathematics Studies, vol. 115, Princeton University Press, Princeton, N.J., 1987, xv+480 pp., $50.00 ($18.95 paperback). ISBN 0-691-08434-3

The central problem in knot and link theory is to distinguish link types via computable invariants. Figure 1 shows an example. for 75 years the two knots in Figure 1 were thought to represent distinct knot types, until in 1974 it was discovered that a totally unmotivated but very simple change in the projection takes the left picture to the right [**P**]. If we cannot find such a change, how can we be sure that two knots are distinct?

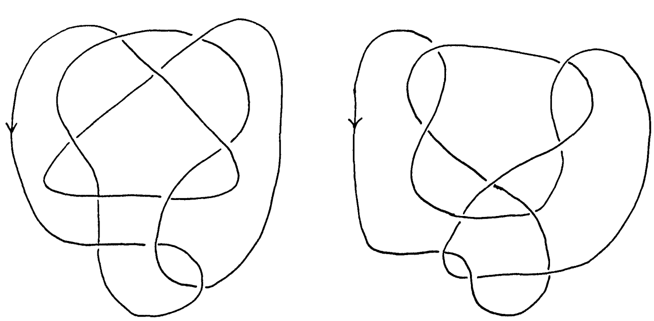

FIGURE 1

This review was written when the author was visiting the University of Paris VII. Partial support and the hospitality of the Mathematics Department during that visit are gratefull acknowledged.