1003-55-577   **Daniel C Isaksen*** (`isaksen@math.wayne.edu`), Department of Mathematics, Wayne State University, Detroit, MI 48202. *Braid groups and knitting.*

Understanding knitting in terms of topology is surprisingly subtle. The "unravelability" of knitting means that we can't just apply the traditional notions of knot theory or braid groups. To give the flavor of the difficulties, I'll demonstrate one connection between braid groups and knitting, using "higher derived limits". This is just one small piece of a much larger project to develop a true topological theory of knitting. (Received September 23, 2004)