1094-57-171 **Jozef H. Przytycki*** (przytyck@gwu.edu), Department of Mathematics, George Washington University, Washington, DC 20052, and **Witold Rosicki**. *Cycle invariants of codimension 2-embeddings $f : M^n \to R^{n+2}$.*

For any quandle $(X; *)$ we construct $(n + 1)$- and $(n + 2)$-cycle invariants of M^n in R^{n+2} using colorings and shadow colorings of (R^{n+1}, D_M) where D_M is a diagram of a knotting $f : M^n \to R^{n+2}$. Our construction is based on work of Scott Carter, Roger Fenn, Seiichi Kamada, Colin Rourke, Masahico Saito, and Brian Sanderson. (Received August 22, 2013)