

1014-57-192 **Blake Mellor*** (bmellor@lmu.edu), University Hall, Suite 2700, 1 LMU Dr., Los Angeles, CA
90045. *Weight systems for Milnor invariants.*

We use Polyak's skein relation to give a new proof that Milnor's string link homotopy invariants are finite type invariants, and to develop a recursive relation for their associated weight systems. We show that the obstruction to the triviality of these weight systems is the presence of a certain kind of spanning tree in the intersection graph of a chord diagram. (Received August 16, 2005)