

THE ROLE OF LIOUVILLE TYPE SYSTEMS IN THE STUDY OF NON-TOPOLOGICAL VORTICES IN CHERN SIMONS THEORY

GABRIELLA TARANTELLO *

We discuss elliptic systems of Liouville type in presence of singular sources, as derived from the study of non-abelian (selfdual) Chern-Simons vortices. We shall focus on the so called non-topological vortex configurations, and present some recent results. Also we discuss many of the still open questions.

*University of Rome "Tor Vergata", email: tarantel@mat.uniroma2.it