The Baouendi-Treves approximation theorem for Gevrey classes and applications

GUSTAVO HOEPFNER, RENAN D. MEDRADO AND LUIS F. RAGOGNETTE

Abstract. In this work we show how to extend the seminal Baouendi-Treves approximation theorem for Gevrey classes and ultradistributions. As applications we present a Gevrey version of the approximate Poincaré lemma and study ultradistributions vanishing on maximally real submanifolds.

Mathematics Subject Classification (2020): 35F05 (primary); 35A20, 32V05 (secondary).