



Jesus ARAUJO* (araujoj@unican.es), Facultad de Ciencias, Universidad de Cantabria, E-39005 Santander, Cantabria, Spain, and **Krzysztof JAROSZ** (kjarosz@siue.edu), Department of Mathematics and Statistics, Southern Illinois University Edwardsville, IL 62026, USA, *Realcompact spaces, automatic continuity and isometries.*

ABSTRACT. For realcompact spaces X and Y we give a complete description of the linear biseparating maps between spaces of vector-valued continuous functions on X and Y , where special attention is paid to spaces of vector-valued *bounded* continuous functions.

We prove that a biseparating map between spaces of vector-valued continuous functions is usually automatically continuous. However, we also discuss special cases when it is not true. Some of these results are applied to describe the linear isometries between spaces of vector-valued bounded continuous and uniformly continuous functions.