Some results about diametral dimensions

Françoise Bastin¹, Loïc Demeulenaere¹, Leonhard Frerick², Jochen Wengenroth²

This poster presents the main results of [1] and [2]. Firstly, it gives sufficient conditions to have the equality between two diametral dimensions of a Fréchet space (for more precision, see [3, 4, 5, 6, 7, 8]). Secondly, it provides some examples of spaces verifying these conditions. Finally, it gives a family of Schwartz – or even nuclear – (non metrizable) locally convex spaces for which the two diametral dimensions are different.

References

[1] F. Bastin and L. Demeulenaere, On the equality between two diametral dimensions, accepted for publication on April 4, 2016, in Functiones et Approximatio, Commentarii Mathematici


¹Department of Mathematics, University of Liège, 12 Allée de la Découverte, 4000 Liège, Belgium  
F.Bastin@ulg.ac.be, Loic.Demeulenaere@ulg.ac.be

²FB IV – Mathematik, University of Trier, 19 Universitätsring 54286 Trier, Germany  
frerick@uni-trier.de, wengenroth@uni-trier.de