

Year: 2010

Vol.: 76

Fasc.: 4

**Title:**  $L_1$ -factorization of Pietsch integral operators

**Author(s):** Raffaella Cilia and Joaquín M. Gutiérrez

Given a compact Hausdorff space  $K$  and a regular positive finite, Borel measure  $\mu$  on  $K$ , we characterize the operators on  $C(K)$  admitting a factorization through the natural inclusion of  $C(K)$  into  $L_1(K, \mu)$ . We also characterize the operators on  $L_\infty(\Omega, \nu)$ , with  $\nu$  a positive finite measure, that factor through the natural inclusion of  $L_\infty(\Omega, \nu)$  into  $L_1(\Omega, \nu)$ .

**Address:**

Raffaella Cilia  
Dipartimento di Matematica  
Facoltà di Scienze  
Università di Catania  
Viale Andrea Doria 6  
95100 Catania  
Italy

**Address:**

Joaquín M. Gutiérrez  
Departamento de Matemática Aplicada  
ETS de Ingenieros Industriales  
Universidad Politécnica de Madrid  
C. José Gutiérrez Abascal 2  
28006 Madrid  
Spain