On variational problems with
the fractional-order backward-difference

Agnieszka B. Malinowska

Faculty of Computer Science
Bialystok University of Technology
15-351 Bialystok, Poland
a.malinowska@pb.edu.pl

We shall introduce a discrete-time multidimensional fractional calculus of variations. The fractional operators are defined in the sense of Grünwald–Letnikov. We derive necessary optimality conditions and then give examples illustrating the use of obtained results.
This talk is based on a joint work with Tatiana Odzijewicz.