Improvements of the composition rule for the Canavati fractional derivatives and applications to Opial-type inequalities

(Talk)

Maja Andrić
Faculty of Civil Engineering, Architecture and Geodesy,
University of Split, Croatia
maja.andric@gradst.hr

(joint work with Josip Pečarić and Ivan Perić)

Using the Laplace transform we prove that some conditions in the composition rule for the Canavati fractional derivatives can be relaxed. As an application, an Opial-type inequality involving the Canavati fractional derivatives is presented.

MSC2010: 26A33, 26D15.

Keywords: the Canavati fractional derivatives, composition rule, Opial-type inequalities.

Section: 8.