

1135-34-775

John R. Graef* (john-graef@utc.edu), Department of Mathematics, University of Tennessee at Chattanooga, Chattanooga, TN, and **N. Guerraiche** and **S. Hamani**. *Initial value problems for fractional functional differential inclusions with Hadamard type derivatives in Banach spaces.*

The authors establish sufficient conditions for the existence of solutions to boundary value problems for fractional differential inclusions involving the Hadamard type derivatives of order $\alpha \in (0, 1]$ in Banach spaces. (Received September 14, 2017)