Mapping properties of composition operators acting on Sobolev spaces of fractional order

THOMAS RUNST

Mathematisches Institut, Friedrich–Schiller-Universität Jena

Abstract

We give a survey of some recent results on sufficient and necessary conditions on composition operators

$$T_f : \ g \to f \circ g$$

to map one Sobolev space of fractional order into another. Furthermore we discuss some interesting (open) problems.

Authors' address:
Thomas Runst
Mathematisches Institut
Friedrich-Schiller-Universität Jena
Fakultät für Mathematik & Informatik
D-07743 Jena, Germany
Ernst–Abbe-Platz 2
runst@minet.uni-jena.de