R-Bounded Operator Families Arising from a Compressible Fluid Model of Korteweg Type with Surface Tension in the Half-Space

Publons ID	(not set)
Wos ID	WOS:001335816800001
Doi	10.1007/s11785-024-01618-x
Title	R-Bounded Operator Families Arising from a Compressible Fluid Model of Korteweg Type with Surface Tension in the Half-Space
First Author	
Last Author	
Authors	Maryani, S; Murata, M;
Publish Date	NOV 2024
Journal Name	COMPLEX ANALYSIS AND OPERATOR THEORY
Citation	
Abstract	In this paper, we consider a resolvent problem arising from the free boundary value problem for the compressible fluid model of Korteweg type, which is called as the Navier-Stokes-Korteweg system, with surface tension in the half-space. The Navier-Stokes-Korteweg system is known as a diffuse interface model for liquid-vapor two-phase flows. Our purpose is to show the R-boundedness for the solution operator families of the resolvent problem, which gives us the maximal regularity estimates in the L-p-in-time and L-q-in-space setting by applying the Weis's operator valued Fourier multiplier theorem (Weis in Math Ann 319:735-758, 2001).
Publish Type	Journal
Publish Year	2024
Page Begin	(not set)
Page End	(not set)
Issn	1661-8254
Eissn	1661-8262
Url	https://www.webofscience.com/wos/woscc/full-record/WOS:001335816800001
Author	Dr SRI MARYANI, S.Si, M.Si