

# Partial Differential Equations Seminar

**Title** Compactness Lemma for sequences of divergence free Bochner measurable functions

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**Date** April 14<sup>th</sup> , 15:00 ~ 16:00

**Location** 과학관 254

## Abstract

We provide a local compactness lemma, that can be used for various models of incompressible fluids in a general domain, such as generalized Newtonian fluids. In particular, it helps for the proof of the existence of weak solution to those systems, when it comes to carrying out the passage to limit for sequences of weak solution to a corresponding approximate system. The key argument of our approach is the use of the local pressure decomposition in order to avoid the construction of a global pressure.



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