

ON A NON-ISOTHERMAL MODEL FOR NEMATIC LIQUID CRYSTALS

Eduard Feireisl

Institute of Mathematics, Academy of Sciences of the Czech Republic, Praha

*joint work with E. Rocca (Milano), G. Schimperna (Pavia)*

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We propose a new model describing the evolution of a liquid crystal substance in the nematic phase under the influence of temperature changes. The existence is shown in the framework of distributional solutions, without any essential restriction on the size of the data and the length of the time interval.