Subject: Postdoc Position, Scientific computing/ numerical simulation From: Gregor Gassner <<u>ggassner@math.uni-koeln.de</u>> Date: November 07, 2016

The Numerical Simulation group of Prof. Gregor Gassner invites applications for a postdoc position in scientific computing/numerical simulation. The group develops numerical schemes for the simulation of advection-dominated problems governed by non-linear hyperbolic and/or mixed hyperbolic-parabolic conservation laws. The focus is on entropy stable high order methods with adaptivity in space and time, such as e.g. the discontinuous Galerkin method. A special emphasis in the development of the numerical algorithms is on the high performance computing aspects of the methods: only methods that scale to hundreds of thousands processors are considered and

developed. We are looking

for a postdoc candidate that holds an excellent degree in scientific

computing or applied mathematics (or a related field). The successful

candidate should have a strong background in the development of

scientific simulation codes with excellent programming skills in

either Fortran 90 or C/C++. Experience in developing adaptive

símulation codes is desired as well as experience in high performance

computing. She/he will work on the development of an adaptive high

order simulation framework for compressible fluid dynamics with a

focus on high performance computing. Experience with the development

of discontinuous Galerkin codes is a plus, but not necessary. The

University of Cologne is an equal opportunities employer.

Applications of women are thus especially encouraged; applications of

disabled persons will be given preferential treatment to those of

other candidates with equal qualifications. Closing date for

application is February 15, 2017, but search will continue until the

position is filled. Applicants should send a single PDF file containing a CV, educational record, and a short statement of research

activities and programming experience to Gregor Gassner

(ggassner@math.uni~koeln.de, subject "ERC postdoc"). Please indicate

your possible starting date and list at least two academic references.

The position is funded by the European Research Council and the

initial salary is based on the German E13 TV-L scale (39.84

hours/week) if terms and conditions under collective bargaining law

are fulfilled, which accounts for experience and qualification. Possible starting date for the position is April

2017. The initial contract is limited to two years with a

possíble extension up to five years total.