A new code for the numerical simulation of relativistic flows on supercomputers by means of a low-dissipation scheme

Dr. of Sc. Igor Kulikov
Institute of Computational Mathematics and Mathematical Geophysics SB RAS
Novosibirsk, Russia

kulikov@ssd.sscc.ru
RHydroBox3D code

Domain Decomposition

Geometry Decomposition
- MPI

Threads Decomposition
- OpenMP / POSIX Threads

Vectorization
- AVX 512

\[
F = \frac{1}{2} \times \left( f_L + f_R \right) + \frac{c + \| \vec{u} \|}{2} \times (v_L - v_R)
\]
Igor Kulikov  Doctor of Science, Professor  
kulikov@ssd.sscru  
Specialist in solving hydrodynamics equation, computational astrophysics parallel computing, and HPC software development.

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