Scaling Deterministic Solution of the Boltzmann Transport Equation on
Heterogeneous Computing Platforms

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We revisit a domain-specific parallel preconditioning scheme for spherical harmonics expansions of the Boltzmann transport equation. The scheme, which has been initially developed for graphics processing units, is refined and extended to distributed memory architectures. Numerical experiments demonstrate the suitability of the proposed scheme for moderately sized compute clusters. Finally, we outline future research directions aimed at further improving scalability.