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	abstract	A gas-kinetic flux splitting method is developed for the ideal magnetohydrodynamics (MHD) equations. The new scheme is based on the direct splitting of the flux function of the MHD equations with the inclusion of â€œparticleâ€ collisions in the transport process. Consequently, the artificial dissipation in the new scheme is greatly reduced in comparison with the MHD flux vector splitting method. Numerical results from the current scheme are favorable compared with those from the well-developed Roe-type MHD solver. In the current paper, the general principle of splitting the macroscopic flux function based on the gas-kinetic theory is presented. The flux construction strategy may shed some light on the possible construction of accurate and robust hybrid schemes for the compressible flow simulations.	abstract	A gas-kinetic flux splitting method is developed for the ideal magnetohydrodynamics (MHD) equations. The new scheme is based on the direct splitting of the flux function of the MHD equations with the inclusion of â€œparticleâ€ collisions in the transport process. Consequently, the artificial dissipation in the new scheme is greatly reduced in comparison with the MHD flux vector splitting method. Numerical results from the current scheme are favorable compared with those from the well-developed Roe-type MHD solver. In the current paper, the general principle of splitting the macroscopic flux function based on the gas-kinetic theory is presented. The flux construction strategy may shed some light on the possible construction of accurate and robust hybrid schemes for the compressible flow simulations. c Â© 1999 Academic Press		
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