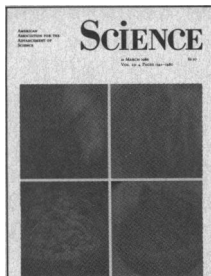


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COVER Patterns of convection cells and wavy disturbances, as observed in laboratory experiments of global-scale planetary and stellar convection. A rotating hemispherical shell of fluid is heated on the inside and cooled on the outside, and an electrostatic radial "gravity" field is imposed. The resulting flows are viewed by Schlieren imaging, providing circular views extending from pole (top) to equator (bottom) and covering a quadrant in longitude. Experiments were carried out in the Spacelab 3 microgravity laboratory flown aboard the space shuttle Challenger in May 1985. See page 61. [J. E. Hart and J. Toomre, University of Colorado, Boulder, CO 80309]

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