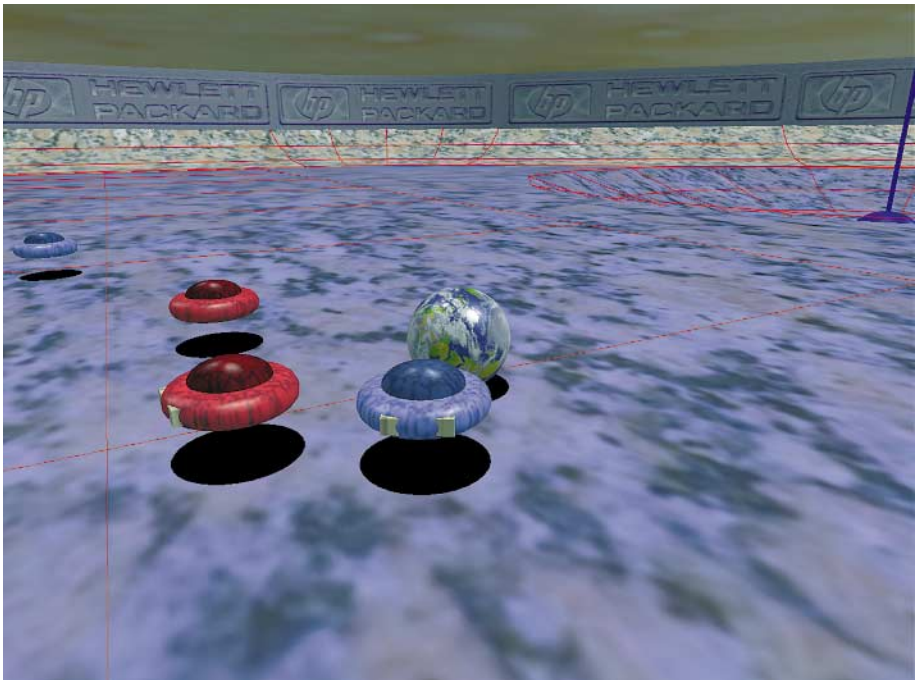
Interactive Multiplayer HoverBall

HoverBall is a demonstration of a collaborative, networked, three-dimensional environment. Two teams of four players each compete to win an air-hockey-like game by maneuvering their craft to turn, accelerate, jump, and brake under full physical simulations of acceleration, collision, friction, and inertia. Players collaborate with teammates via their actions in the arena and two-way audio communications.

HoverBall is implemented on top of an object-oriented, generalized simulation server. Utilizing a layered client-server protocol, it supports multiple-player clients with wide varieties of graphics and audio capabilities. Physics, user interaction, graphical display, and audio feedback are all independent objects computed by the server. Player clients accept simulation data at varying rates and convert them into experiences ranging from fully immersive visual/audio environments to typical workstation graphics displays.



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