SYMPOSIUM ON VISIONS AND STRATEGIES FOR FAR FUTURES (D4)
Space Elevators and Tethers (4)

Author: Dr. Martin Lades
Germany, martin@lades.net

WIRELESS POWER TRANSFER TO A MOVING VEHICLE: EXPLORATIONS WITH THE KANSAS CITY TEAM FOR THE NASA/SPACEWARD POWER BEAMING CHALLENGE

Abstract

The Kansas City team recently took the silver medal in the 2009 NASA power beaming competition. The task this time was to move a climber up a vertical tether of 1km length at either 2m/s or 5m/s average speed for two different prize levels. KCSP, as one of only two teams, successfully climbed several times to over 500m on automated power-tracking with an 8kW Laser. For the Kansas City team the term "pirates" stands in the time-honored tradition of privateers. They take risks executing tasks on special funding, that their government is not willing to take, may it be catching merchant ships for booty or researching innovative concepts for space exploration. The talk tells about the road travelled developing for the power beaming competition, solutions discovered and issues encountered, from a personal perspective.