



"Black Box Magnetricks" - a mobile museum on rock and paleomagnetism as part of Bremen's "City of Science" program

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Bremen is the first German city to receive the prestigious "City of Science" price introduced in 2005 by the "Stifterverband für die Deutsche Wissenschaft", a national trust for the promotion of science and academic education in Germany. The city responded with a lively nine months' science festival featuring over 700 individual science-related events such as public lectures, special exhibitions, science camps and courses for children and adolescences, radio broadcasts, special circus and theater performances and many other program formats. As one central project, twelve black containers were equipped as small mobile science centers, scattered throughout the Bremen town quarters and displaced every fortnight over six months. Researchers from all fields of science were invited to conceive, realize and operate a "Black Box" to present their very special field of science to the public. The Bremen Marine Magnetism group was given the opportunity to create a "Magnetricks" Black Box introducing fundamentals of paleo-, rock and environmental magnetism in a playful and amusing fashion. Three large outdoor and three smaller indoor experimentation tables (some of which will be actually presented at the conference) develop central concepts of magnetism purely from experiment and observation: (1) magnetic ordering and magnetic domains, (2) the basic magnetic properties of rocks, (3) the omnipresence of latent (paleo)magnetic information, (4) magnetic polarity changes, (5) magnetic seafloor anomalies patterns, (6) plate tectonics and paleomagnetism and (7) the weird behavior of ferrofluids. Over the year, many thousands of visitors from kindergarten kids to retired sailors, - including even the German president Horst Köhler - caught a grasp of the magic of magnetism and engaged us presenters into the most curious conversations. An overview and rationale of the science container can be found on the webpage www.geophysik.unibremen.de/blackbox.