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Abstract for an Invited Paper for the APR10 Meeting of the American Physical Society

Perspective of an Artist Inspired by Physics

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Using digital images and video I will be presenting thirty years of my science based artwork. Beginning in the late 1970's my gallery and museum installations used lodestones and suspended compasses to reveal the earths' magnetic field. Through the 1980's my work included these compass installations and geologically inspired tableaux that had one thing in common, they were designed to expose the invisible forces of nature. Tectonics, the Coriolis force, and magnetism were among the subjects of study. In 1988, on the basis of my work with invisible forces, I was selected for a commission from the General Services Administration for the new Central Intelligence Agency headquarters in Langley Virginia. This work titled Kryptos included a large cryptographic component that remains undeciphered twenty years after its installation. In the 1990's Kryptos inspired several of my museum and gallery installations using cryptography and secrecy as their main themes. From 1995-1998 I completed a series of large format projections on the landscape in the western US and Ireland. These projections and the resulting series of photographs emulated the 19th century cartographers hired by the United States Government to map the western landscape. In 1998 I began my project titled Atomic Time. This installation shown for the first time in 2004 at the Corcoran Gallery in Washington DC, then again in the Gwangju Biennale in South Korea was a recreation of the 1944 Manhattan Project laboratory that built the first Atomic Bomb. This installation used original equipment and prototypes from the Los Alamos Lab and was an extremely accurate representation of the laboratory and the first nuclear bomb called the "Trinity Device." I began my current project Terrestrial Physics in 2005. This installation to be shown in June 2010 at the Museum of Contemporary Art in Denver is a recreation of the large particle accelerator and the experiment that fissioned Uranium in 1939 at the Carnegie Institution in Washington DC. This was the first time uranium had been fissioned using a particle accelerator and it was demonstrated for an audience including, Enrico Fermi, Niels Bohr and Merle Tuve.