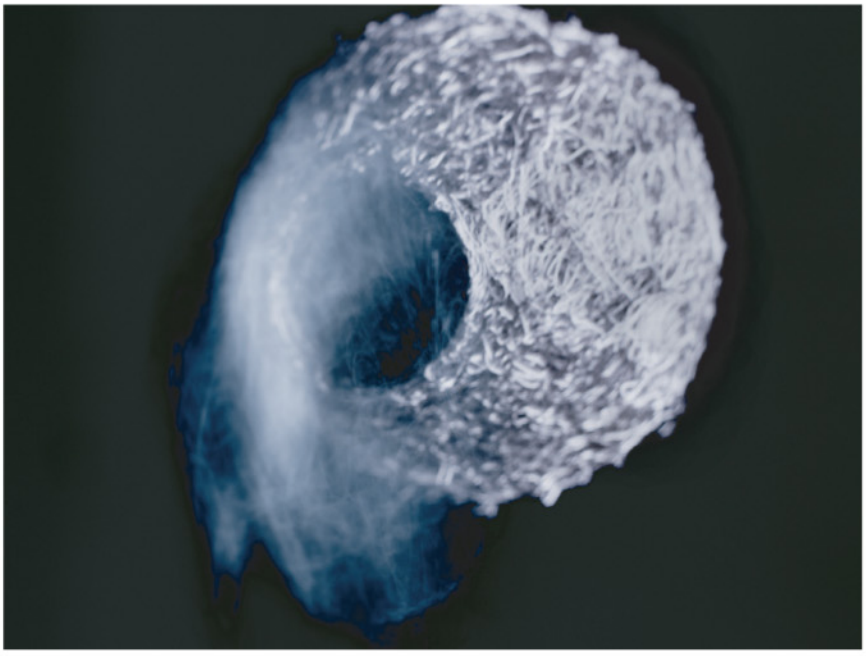
Into the Crucibles of Nature

Benaki Museum, Athens
30th September 2009
Art///Fiorella Lavado
Science////Arthur I. Miller

From models of astronomical objects developed from data taken by space telescopes, artists generate scientific visualisations. They give us some idea of what these mysterious objects actually look like. But what has been missing are visual representations that evoke their frightening grandeur and the poetry behind them. Towards that goal artist Fiorella Lavado and scientist Arthur I. Miller have been working together in an artist-scientist collaboration. Together they explore representations of nature that go beyond scientific visualisations.

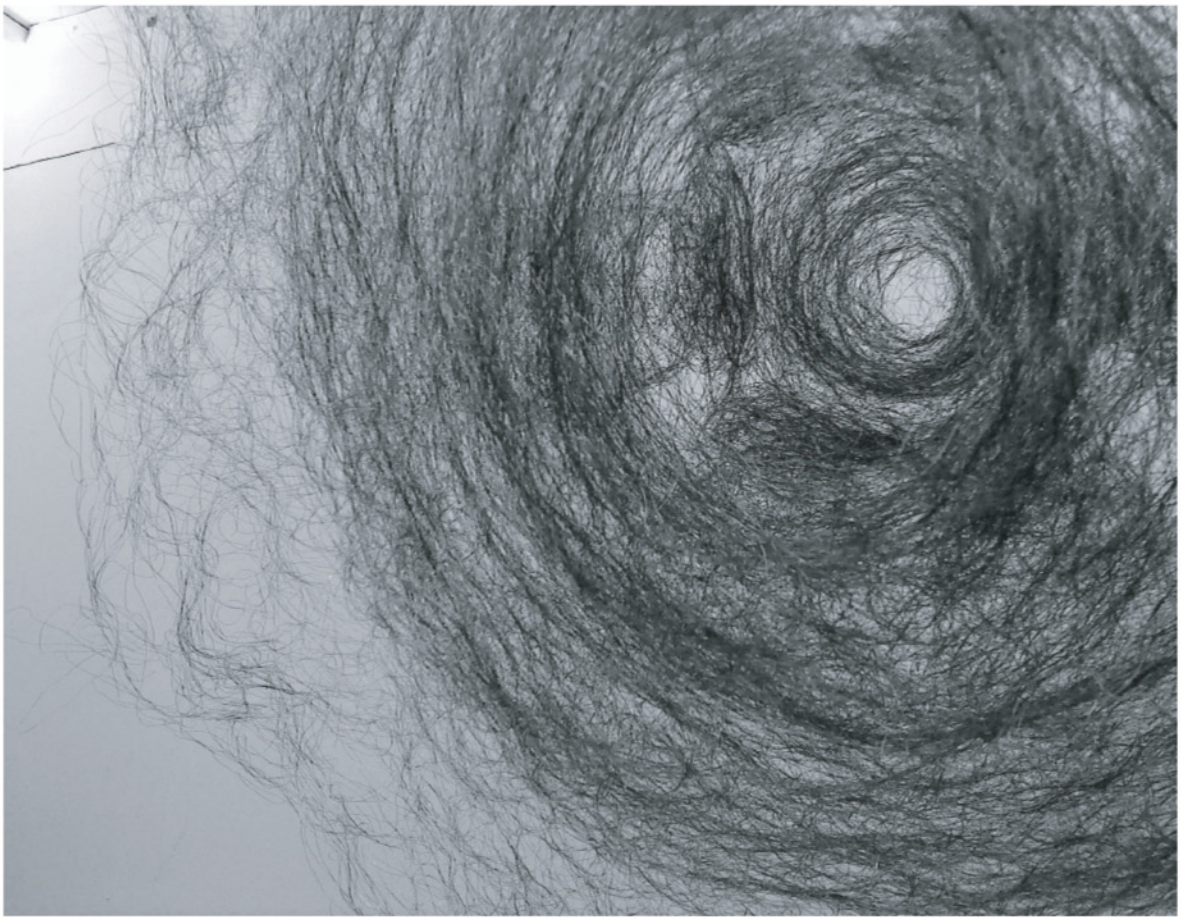
"Our collaboration turns around our ongoing dialogues. Fiorella reads Arthur's books as well as references he suggests, not only for information but also for inspiration. This is the basis for the creation of our work."

Fiorella Lavado
Weaving a Wormhole



Fiorella Lavado
Object 11/11 NESTS 2008
7cm x 7cm x 7cm
Stainless steel wire 0.18mm
Photograph by Noel Mclaughlin (2009)

Using ultra-thin wire, Fiorella weaves objects that evoke the basic characteristics of black holes, wormholes and planetary nebulas, bringing out their hidden aspects. Accompanying photographs by Noel Mclaughlin complement the wire structures.



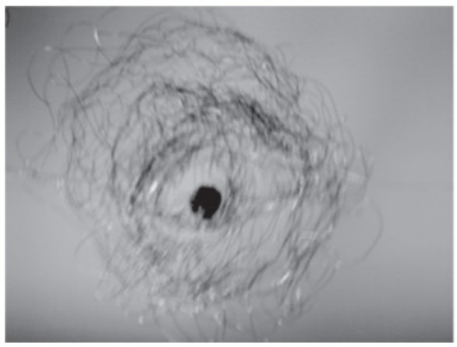
Fiorella Lavado
Blackhole 2008-2009
Stainless steel wire 0.2mm
1m x 1m x 50cm
studio view

Black holes can be huge. Every galaxy has one. They can be engines of doom, as well as sources of energy, they may even contain portals to other universes, and also even “sing.” They are a cosmic show unto themselves.

Benaki Museum, September 2009

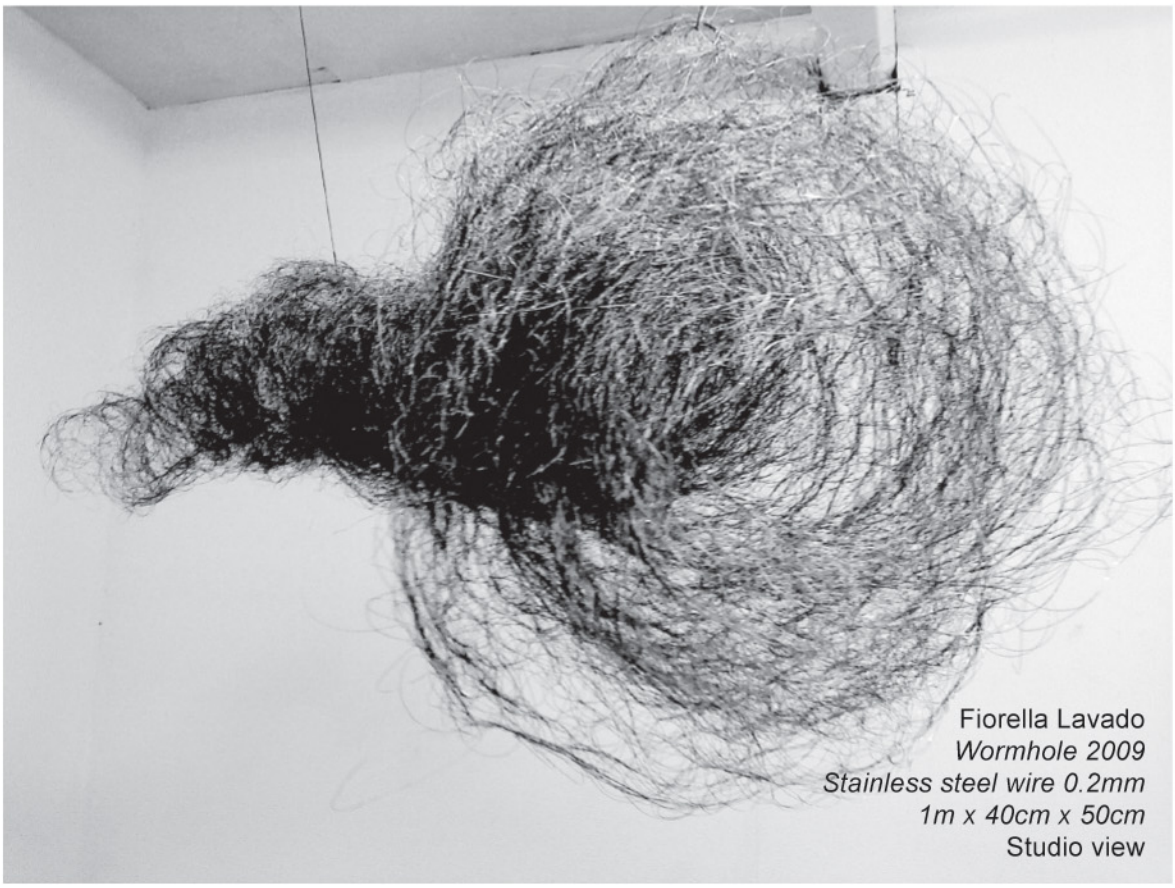
When a star similar to our sun burns out its nuclear fuel its outer layers lift off. The resulting structure is a planetary nebula. About a trillion kilometres across, the shell of gas glows. The core inside eventually cools down, becomes invisible and forms a white dwarf star. It is 80% carbon, like a diamond in the sky. When our sun enters the planetary nebula stage, the ultra-hot shell of gas will swallow up the earth. Before that happens, some four billion years into the future, our descendants will have to find another planet, in another solar system far far away. Wormholes offer a possibility for interstellar migration.

Astronomers using NASA's Hubble Space Telescope have obtained images of the strikingly unusual planetary nebula, NGC 6751, glowing in the constellation Aquila



This is how the *Planetary Nebula (2009)* started

Fiorella Lavado
Planetary Nebula 2009
60cm x 60cm x 60cm
Stainless steel wire 0.18mm
Studio view



Fiorella Lavado
Wormhole 2009
Stainless steel wire 0.2mm
1m x 40cm x 50cm
Studio view

A wormhole can be constructed by burrowing through the fabric of space and time. By this means you can arrive at your destination in minutes instead of perhaps millions of years. For the artist the process of weaving a wormhole is akin to a spider spinning a web as it moves along in space and time. But she also moves backwards along the wormhole in order to reinforce its structure, thus evoking an image of space and time folding on itself. In this way the artistic creation mirrors processes occurring in the universe.

"We are trying to glimpse the mysteries and wonders of the cosmos. This is possible only by going beyond science as it is customily understood - by means of a combination of art and science. In this way we can jointly explore deep space and deep time, out there, many light years away."

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