

Addendum to Rizzo_BMV

Interested community:

QED and Non-linear electrodynamics community, both from the experimental and theoretical point of view.

Axion search community.

Neutron star astrophysicists.

Timeline:

This program can be developed in five years once the detailed experiment design is completed.

Construction and operating costs:

Costs can be assigned to four general items, which are magnets, power supply, optics and manpower.

- Magnets can be realized by our laboratory. Around 50 000 € are needed for one pulsed coil and cryostat. About a total amount of 0.5 M€ should be necessary for this item.

- A new power supply is certainly needed to be able to run such an important experiment without perturbing the standard activities of our laboratory. The cost of a few MJ power supply is about 2 M€.

- Optics, including suspensions, consists of many individual items. We think that about 1 M€ will be necessary to furnish the material and equipment to construct the whole apparatus.

- Not taking into consideration permanent position physicist salary, we believe that about 0.5 M€ will be necessary over the 5 years period to attract PhD students and Post Docs to participating to our experimental effort.

Computing requirements

There are no special computing requirements.