



Virgo - EGO Scientific Forum Charter

(March 2014)

1. Introduction

This document describes the Virgo- EGO Scientific Forum (VESF), its main functions and its internal organization. The relationship with the Virgo collaboration and the European Gravitational Observatory (EGO) are also described.

2. Description and goals of VESF

VESF has the purpose of enlarging the involvement of the scientific community in the scientific activities of Virgo and EGO, and fostering participation in the Virgo data analysis, in studies related to gravitational wave sources and signals, and in the organisation and running of multimessenger programs aimed at identifying and interpreting astrophysical sources of events detected by gravitational wave interferometers. VESF is open to scientists active in the field of astrophysics, astroparticle, general relativity, gravitation and other fields of experimental or theoretical research of potential interest to Virgo and EGO..

VESF is a forum in which non-Virgo scientists can also interact with the Virgo collaboration regarding the R&D activity for future improvements

3. Functions of VESF

VESF is a reference scientific forum for discussions and proposals on theoretical and experimental strategies and multimessenger programs concerning gravitational wave detection, with special emphasis on the Virgo data analysis and exploitation, and including possible upgrades

of the Virgo instrument. Members of VESF may participate in one or several of the following tasks:

1. Studies related to astrophysical sources potentially observable with gravitational wave detectors and calculation of the corresponding gravitational wave signal.
2. Multimessenger programs aimed at identifying astrophysical sources of detected events.
3. Development of Virgo data analysis algorithms and techniques and their implementation.
4. R&D for future instrumentation and upgrades of advanced detectors

4. Membership

4.1 VESF Membership

Members of VESF are research groups belonging to a given institution. A research group is composed by a minimum of three people (including scientists, senior engineers and PhD students). Under particular circumstances the participation of individuals is accepted. Participation in both the VESF and other scientific collaborations in the field of gravitational wave detection and in other fields of astrophysics is possible and welcome. The contribution of each member to the VESF is described in a Letter of Intent (LoI) between the member and the VESF itself.

4.2 Joining VESF

New VESF members are proposed to the VESF Executive Board and a draft LoI is prepared by the new member, in consultation with the Executive Board. The new membership and LoI are approved by the VESF Executive Board following the positive vote of a qualified majority (at least five positive votes).

5. VESF Organization

5.1 VESF Executive Board

VESF is governed by the VESF Executive Board. The Executive Board is composed by the EGO Director, the Virgo Spokesperson the VESF coordinator and four members elected by the VESF Council for a period of three years. The latter members are elected to represent the following **Main Areas**:

- i. General Relativity,
- ii. Theoretical Astrophysics and Cosmology,
- iii. Observational Astrophysics and Multimessenger Programs,
- iv. Experiments in fields related to GW detection not participating to Virgo.

The VESF EB is responsible for:

1. Proposing the program and allocation of funds for the VESF activities to the Virgo Project and EGO for each year.
2. Organising the VESF Schools.
3. Setting the priorities of the VESF proposed programs and fellowships.
4. Promoting the coordination of the activities of VESF members in areas of direct impact for the operational phase of Virgo, in particular in the field of data analysis, multimessenger observations and source modeling.
5. Advising the VSC on matters related to the organization and running of multimessenger programs and to the exploitation of the scientific opportunities of the Virgo events through the collaboration between the gravitational wave and the astronomy and astrophysics communities.

5.2 VESF Coordinator

The VESF Coordinator chairs the Executive Board and is elected by the

board itself. In case the VESF coordinator is an elected member of the Executive Board, the second-voted scientist by the VESF Council in the same main area as the VESF Coordinator becomes a member of the Executive Board. The VESF Coordinator can assign specific coordination tasks to people participating in the VESF. The VESF Coordinator participates in the open sessions of the STAC meetings and is invited to participate in the open sessions of the EGO Council meetings.

5.3 VESF Council

The Council is composed of the Executive Board plus one representative per each VESF group consisting of at least 3 people. VESF Council members can propose new policies, scientific themes and activities to the VESF executive board. Council meetings usually take place once a year, are chaired by the VESF Coordinator and may be accompanied by a VESF Scientific Meeting involving the groups and other participants.

5.4 Resources for VESF

The allocation of fellowships and other resources to VESF members is part of the EGO R&D program.

6. Relationship with the Virgo collaboration

The relationship between the Virgo collaboration and VESF is managed by the Virgo Spokesperson who is a member of the VESF Executive Board. Access to Virgo data, participation in the Virgo data taking and multimessenger follow up observations are managed via specific MoUs between the concerned VESF member and the Virgo collaboration represented by the Virgo spokesperson. Such MoUs regulate also the publications policy.

7. Relationship with EGO

The relationship between EGO and VESF is managed by the EGO Director, who is a member of the VESF Executive Board.