

TTORCH – A New ESF Research Network for Non-CO₂ Greenhouse Gases

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Met

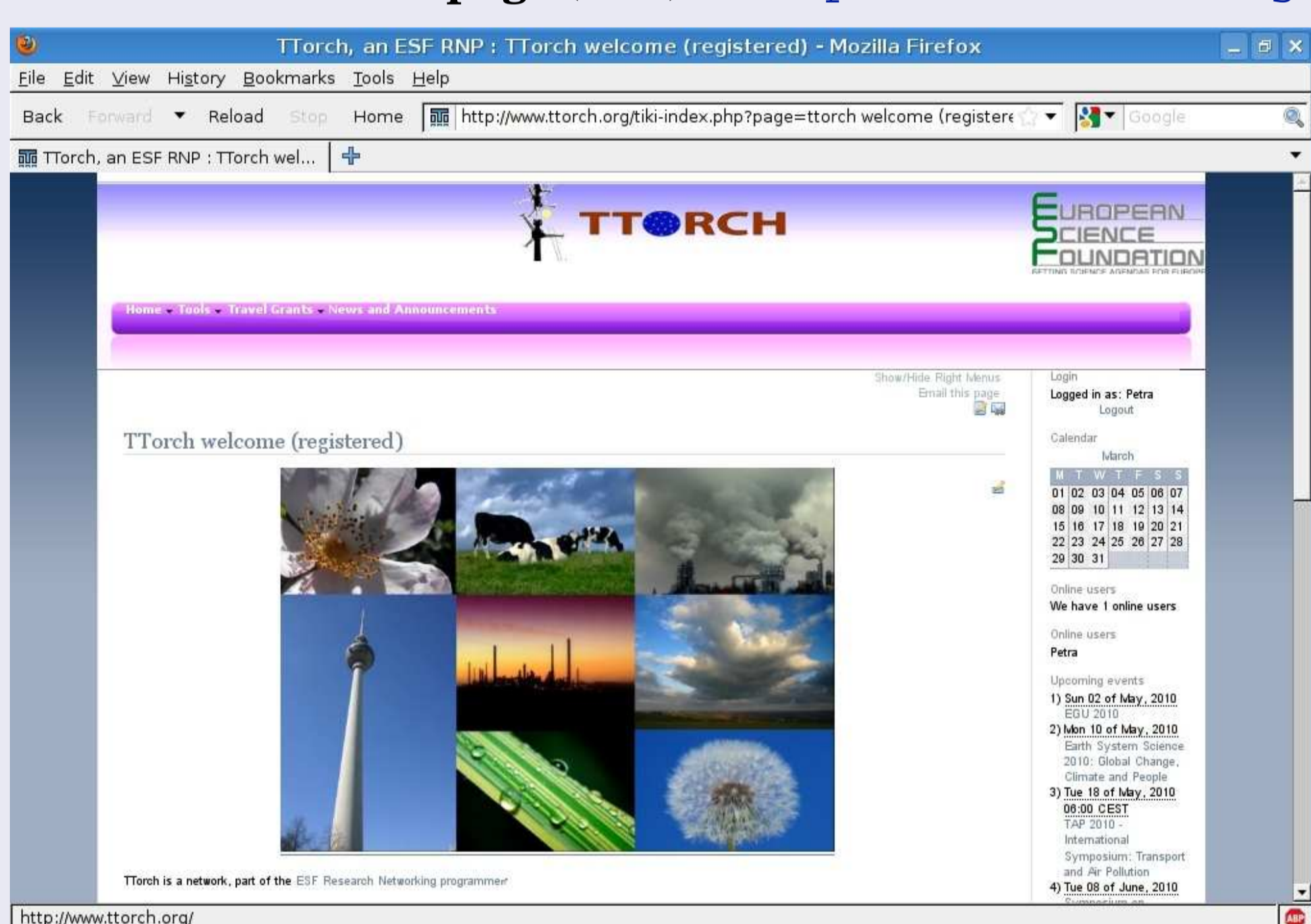


What is TTORCH?

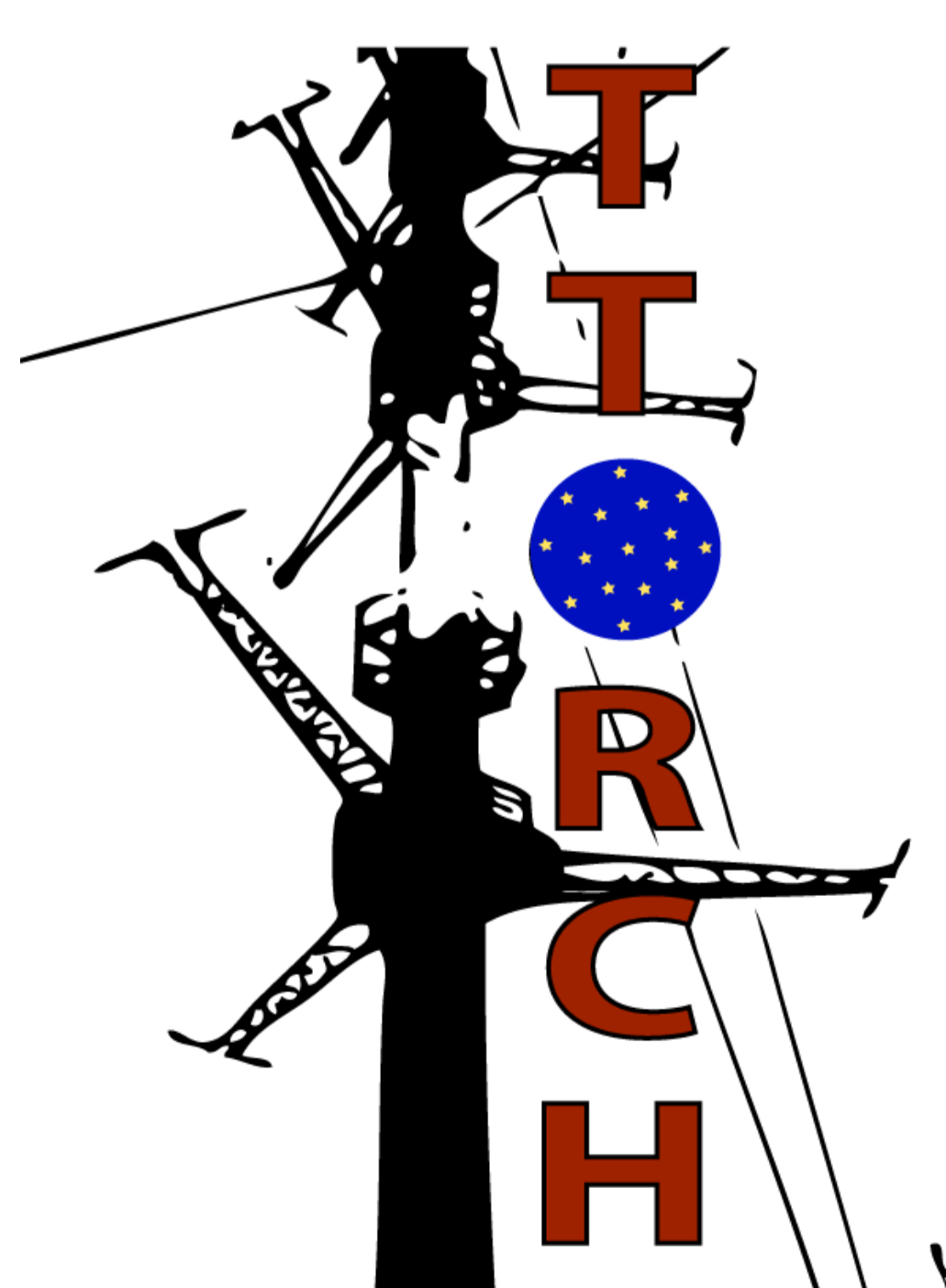
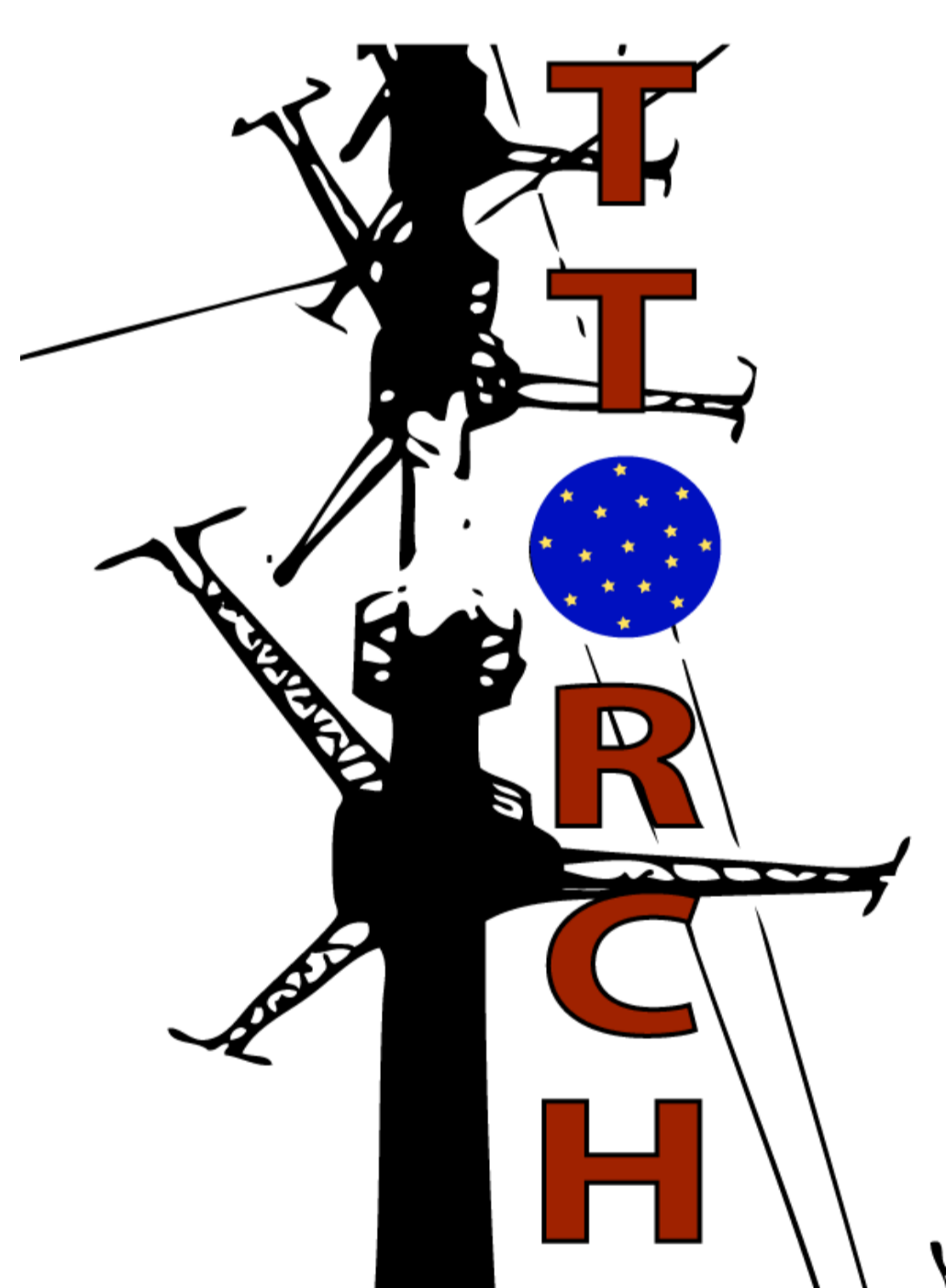
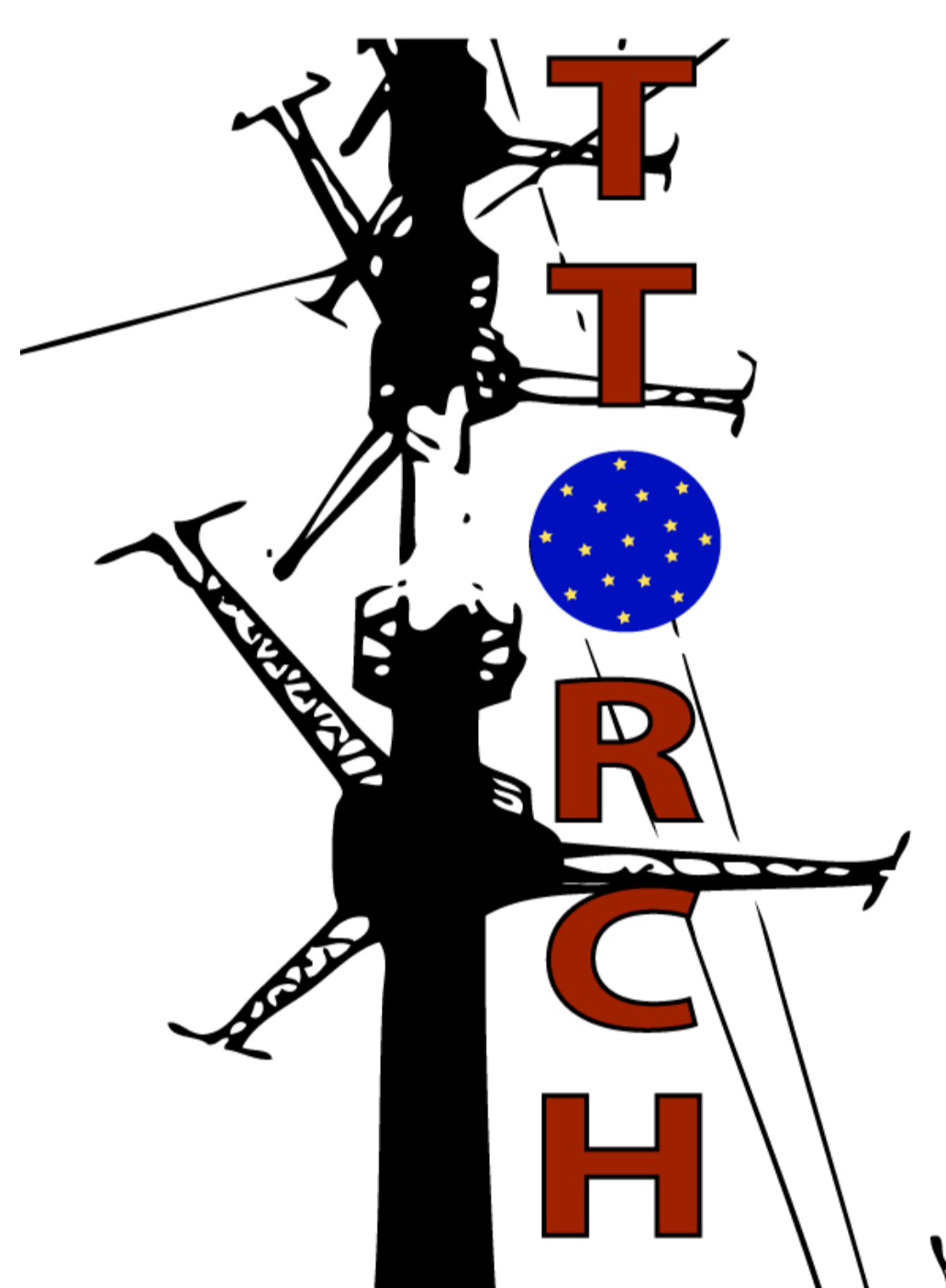
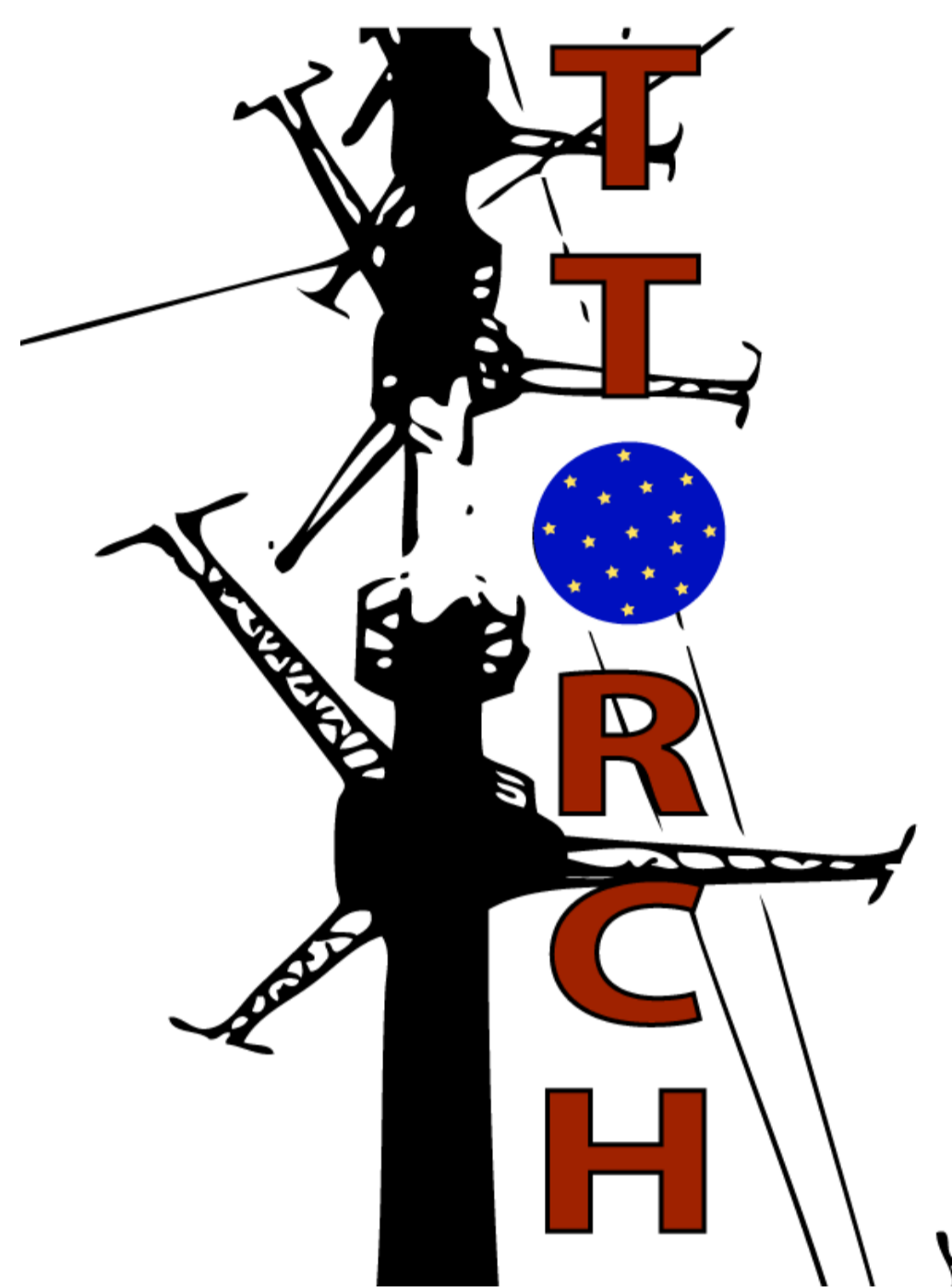
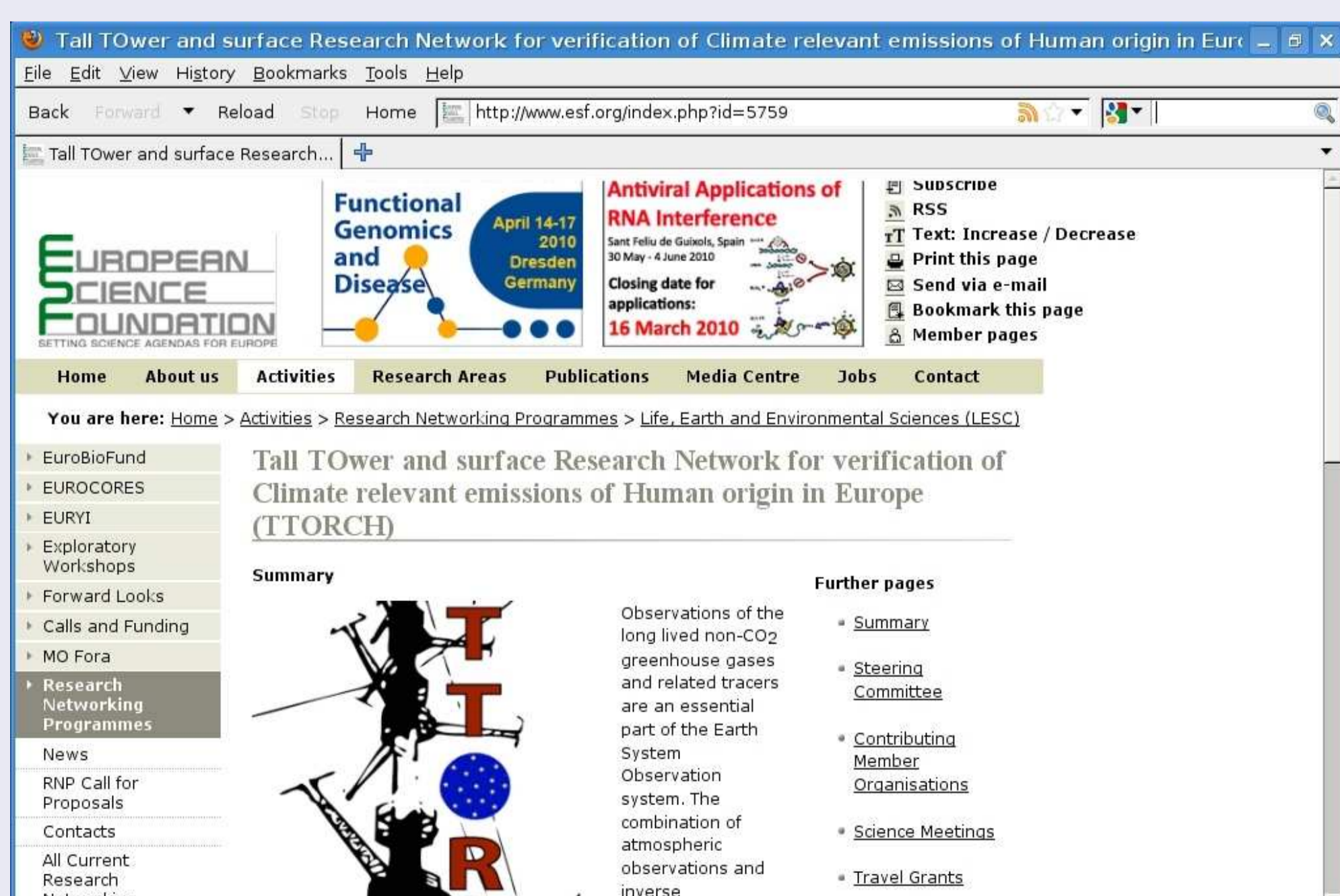
TTORCH (Tall Tower and Surface Observation Research Network for Verification of Climate-Relevant Emissions of Human Origin in Europe) is a **European Science Foundation Research Networking Programme** focusing on measurements and modelling of non-CO₂ greenhouse gases (CH₄, N₂O, SF₆) and related compounds and indicators (e.g., CO, H₂, ¹⁴CO₂, O₂/N₂). The main purpose of TTORCH is to support and help improve the European network of observations of greenhouse gases. In the current context, where the European measurement network has little financial support for non-CO₂ greenhouse gases, TTORCH will assist in maintaining and consolidating quality and consistency within the measurement network. TTORCH will work, by capacity building, towards extension of the measurement network in poorly covered areas, like Eastern Europe. TTORCH builds, inter alia, on the work done in the FP6 project CHIOTTO (Continuous High-Precision Tall Tower Observations of Greenhouse Gases, web site <http://www.chiOTTO.org/>). The Programme will also contribute to strengthening the connection between measurement and modelling scientists by organising joint workshops and publications.

What TTORCH offers to individual scientists

- **Travel grants** for short visits (up to two weeks) and so-called exchange grants for stays up to six months. The closing dates for submission of applications are 31 March, 30 June, 30 September and 31 December each year. The current call is closed on 31 March 2010.
- **Meetings and conferences** on subjects relevant for TTORCH can ask for a financial contribution.
- A **database** of non-CO₂ greenhouse gas measurements in Europe (to go online in 2010).
- Two **summer schools** of each two weeks duration, in Summer 2011 in Finland and another one in 2013.
- An **interactive web page** (wiki) at <http://www.ttorch.org/>:



In addition, there is an **official TTORCH web site** at the ESF, containing for example the list of steering committee members, at <http://www.esf.org/ttorch>:



TTORCH logo showing a tall tower for atmospheric measurements

Some facts about TTORCH

- TTORCH runs for five years from **March 2009 to March 2014**.
 - TTORCH is governed by a **Steering Group** which meets twice per year. *Petra Seibert is the Austrian delegate to this Steering Group and will be happy to support you if needed.*
 - Currently, the **ESF member institutions of the following countries sponsor TTORCH**:
 - Austria (via FWF)
 - Finland
 - Germany
 - Netherlands (Alex Vermeulen from ECN Petten is the Chairperson)
 - Norway
 - Spain
 - Sweden
 - Switzerland
- France is expected to join soon.
New members from Central and Eastern European countries would be especially welcome.

Some related activities

- **Earth System Science 2010: Global Change, Climate and People**
10–13 May 2010, Edinburgh, UK
<http://quest.bris.ac.uk/workshops/AIMES-OSC/>
- **Symposium on Atmospheric Chemistry and Physics at Mountain Sites**
8–10 June 2010, Interlaken, Switzerland
<http://acp.scnat.ch/e/news/events/2010/> (co-sponsored by TTORCH)
- **3rd International Workshop on Uncertainty in Greenhouse Gas Inventories**
22–24 September 2010, abstract submission until 1 April 2010, Lviv, Ukraine
<http://ghg.org.ua/workshop.html>

ICOS – A new European Research Infrastructure for Quantifying and Understanding the Greenhouse Gas Balance of the European Continent and of Adjacent Regions

Website: <http://www.icos-infrastructure.eu/>. ICOS publishes inversion results under <http://www.carboscope.eu/>. The implementation of ICOS will take place in two steps:
Preparatory Phase 2008–2011, the funding commitments will have been endorsed by the governments and mother institutions, the building of the central facilities will be initiated, and the project will be technically developed up to the level of a demonstration year of full operation, but with a reduced number of observational sites. In 2010, the network layout and the reference instruments shall be determined.
Operational Phase from 2012–2031 (!) after the full scale deployment of the network, it will be run in an operational mode, and greenhouse gas concentrations and fluxes will be determined on a routine basis.

Countries such as France and Sweden plan to build a number of stations. Austria has no concentration measurement site and is not yet part of ICOS. I think Austria should try to get involved in this activity, including building (a) concentration measurement site(s)

TTORCH information brochure

An 8-page information brochure about the ESF Research Network TTORCH will be published soon.
If you leave your address in the pocket below, I will send you a copy (or more, if you indicate the desired number).

TTORCH web addresses

<http://www.ttorch.org/>
<http://www.esf.org/ttorch>