



2014 TEA-IS summer school Collioure, 23-27 June 2014, France

- **Monday 23: Physics of atmospheric electricity**
 - Tutorial: The meteorology of thunderstorms
 - Topical talks: Cloud electrification processes, Lightning Physics, Lightning ELF/LF emissions and lightning detection, Lightning space observations for nowcasting
- **Tuesday 24: Lightning induced perturbations of the atmosphere-ionosphere**
 - Tutorial: Discharges above thunderstorms: an overview of observation and modelling
 - Topical talks: Jet observations and theories, The chemistry of high-altitude discharges, Ionization perturbations from lightning and TLEs in the lower ionosphere, Streamers and Leaders in Technology: from electricity distribution to plasma medicine
- **Wednesday 25: High Energy Atmospheric Electricity**
 - Tutorial: High-Energy Atmospheric Electricity
 - Topical talks: TGF observations, Theory and modeling of X- and gamma-ray emission from lightning, Electron Acceleration above Thunderclouds, Possible effects of terrestrial gamma-ray flashes on avionics
- **Thursday 26: Perturbations of the atmosphere-ionosphere induced by thunderstorms**
 - Tutorial : Atmospheric disturbances related to thunderstorms and possible effects on weather
 - Topical talks: Impact of thunderstorm activity on the middle atmosphere dynamics, Variability of the lower ionosphere from VLF observations during thunderstorms, Global Electric Circuit and climate, Gravity wave from thunderstorms: impact on atmospheric and climate models
- **Friday 27: Current and future space projects: objectives, instrumentation and expected impacts**
 - Tutorial: Challenge of space observations
 - Topical talks: FERMI, AGILE, TARANIS, ASIM, GLIMS

