

Preface

The atmosphere is an integral component of imaging atmospheric Cherenkov telescopes (IACTs) and cosmic-ray extensive air shower detectors, the two instruments driving the quickly evolving fields of VHE and UHE astrophysics. In these fields, the atmosphere is used as a giant calorimeter where EASs are initiated and the medium through which Cherenkov light propagates. Uncertainty in current atmospheric conditions and fixed atmospheric models results in a dominant source of systematic errors. With the improved sensitivity of future facilities like CTA, HAWC or for satellite experiments like JEM-EUSO, statistical uncertainties will be reduced, leaving the atmosphere as the limiting factor in the determination of gamma-ray source spectra. Unstable weather conditions necessitate the development of atmospheric monitoring as part of the instrument calibration.

This is the second conference of the Atmohead series, initiated in 2013 in Saclay (Paris, France) with a very successful workshop. For this edition, we had contributions from experts in the fields coming from non-astronomical communities, as well as contribution from interested companies working in the field.