

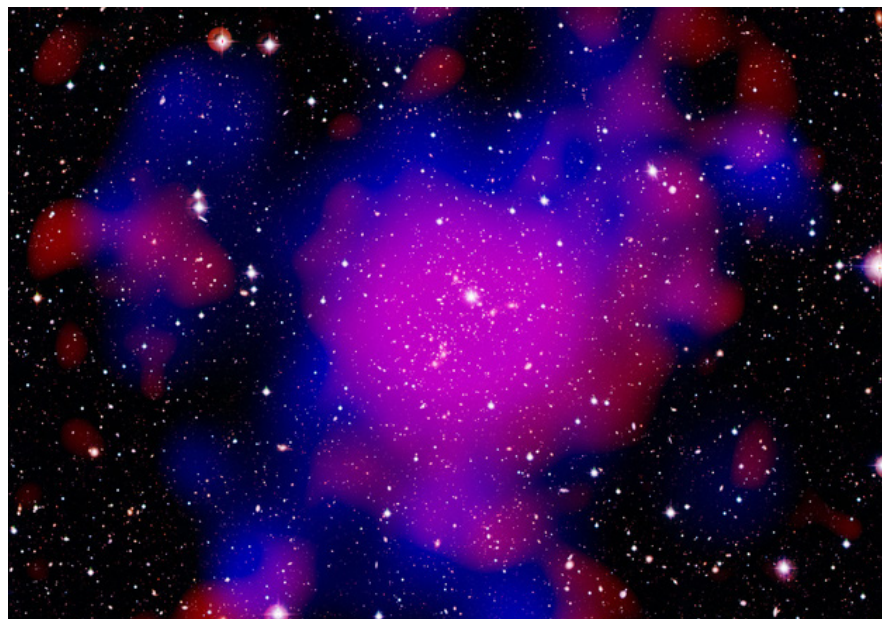


Dominique Eckert

Dominique Eckert holds the position of Senior Lecturer at the [University of Geneva](#) (Switzerland).

His work focuses on the study of hot plasma in the large-scale structure of the Universe. At present, the majority of the Universe's ordinary matter content is in the form of a hot and dilute plasma that fills the large-scale structure set by dark matter, with temperatures exceeding a million degrees. The medium shines predominantly in X-rays because of the high gas temperatures.

Dr Eckert studies the distribution of X-ray emission in massive, collapsed structures (galaxy clusters and groups) and the filamentary network known as the cosmic web. He also studies the influence of supermassive black holes sitting at the center of massive galaxies on the hot gaseous medium that surrounds them, with the aim of understanding how supermassive black holes influence their host galaxies and halos. Dr Eckert was co-chair of Topical Panel 1.2 (Astrophysics of Galaxy Clusters and Groups) in the former Athena structure. Then, he became a member of the SRDT and now of the NASST. In the NASST he is in charge of the liaison with SWG6 (Cosmology and Fundamental Physics).



Components of the galaxy cluster Abell 2744, also known as the Pandora Cluster: galaxies (white), hot gas (red) and dark matter (blue). Credit: ESA/XMM-Newton (X-rays); ESO/WFI (optical); NASA/ESA & CFHT (dark matter)