

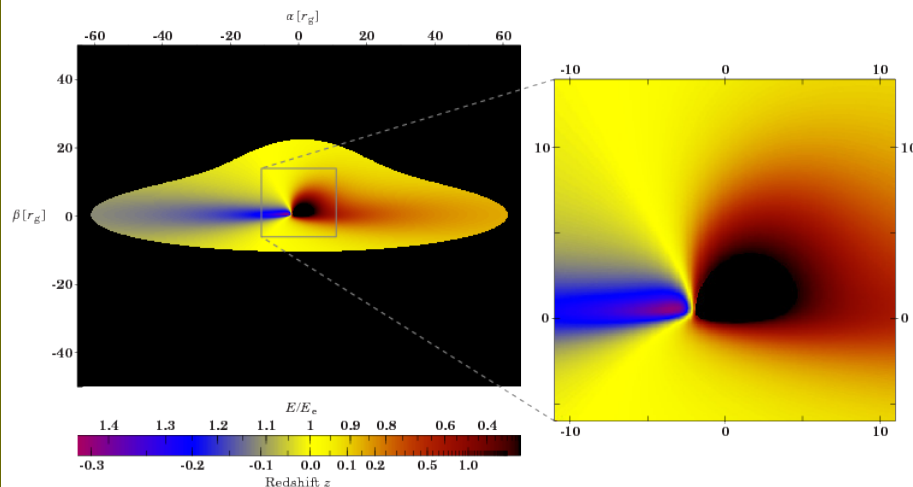
NewAthena Community People



Thomas Dauser

Thomas Dauser works as a research scientist at the [Dr. Karl Remeis Observatory](#) in Bamberg (ECAP, [University Erlangen-Nürnberg](#)), where he is currently pursuing his habilitation. He is member of the [NewAthena WFI](#), [NewAthena X-IFU](#), [eROSITA](#), [Theseus](#), and [BLACKSTAR](#) collaboration and Co-I of the [NewAthena X-IFU](#).

His main focus of research is studying high energy processes around black holes to further our understanding of their immediate vicinity in the presence of strong gravity. As a major contribution, for example, he developed the [relxill](#) model, which calculates relativistic reflection of X-rays at the inner accretion disk in these objects. He is also contributing to the development of scientific X-ray detectors by the development of the end-to-end simulator [SIXTE](#) for current and new missions such as [NewAthena](#), [Theseus](#), [AXIS](#), [eROSITA](#), or [XMM-Newton](#).



General relativistic ray tracing of the inner accretion disk around a black hole. Colors show the energy shift of the emitted and reflected photons.