Next-generation X-ray astronomy
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The future timing capabilities in X-ray astronomy will be reviewed. This will include reviewing the missions in implementation: Astro-H, GEMS, SRG, and ASTROSAT; those under study: currently ATHENA and LOFT; and new technologies that may enable future missions e.g. Lobster eye optics. These missions and technologies will bring exciting new capabilities across the entire time spectrum from micro-seconds to years that e.g. will allow us to probe close to the event horizon of black holes and constrain the equation of state of neutron stars.