

I will review the recent technical and scientific developments in the study of short duration transients. These transients are an important subset of the dynamic radio sky, usually associated with the recurrent or cataclysmic release of energy onto compact objects. Within our galaxy there already exists a rich diversity of short duration events such as pulsars, magnetars, RRATs, brown dwarfs, etc. The extragalactic sky remains largely new territory ripe for discovery. Particle physicists are looking to the radio sky to detect cosmic rays, neutrinos and dark matter candidates such as axions. Astronomers may have recently identified short duration transients at extragalactic distances. I will describe a number of radio experiments at MHz to GHz frequencies which are underway to find new classes of transients. If time allows, I will discuss new real-time search techniques being developed to process these large volumes of and identify signals. I will end with describing an important astrophysical application for extragalactic short duration transients.