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Continuum Observations of Starburst Galaxies

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VLBI and LOFAR international baseline continuum observations of starburst galaxies are reviewed; concentrating in particular on the nearby well studied LIRG/ULIRG sources Arp299 and Arp220. Such observations reveal compact sources (radio supernovae, supernova remnants and AGN candidates), diffuse disk radio emission, galactic outflows and also trace the presence of thermal gas via observations of free-free absorption. Studying the compact supernovae within these sources can give information about stellar evolution in the extreme conditions found in LIRGs/ULIRGs including whether the stellar IMF follows standard values. The observed SNRs are the sites in which relativistic electrons and other particles are accelerated which in turn gives rise to the radio - star-formation rate correlation - which, although it is a vital tool used in astrophysics, is still poorly understood physically, especially within intense star-forming galaxies. Finally high resolution radio continuum observations of outflows from star-forming galaxies help trace mechanical feedback effects which can affect the evolution of galaxies and the regulation of star-formation.