## Z110r Galaxy interactions as triggers of star formation and nuclear activity

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Galaxy interactions and mergers have long been thought to play an important role in galaxy formation and evolution. Quantifying the impact of galaxy interactions on star formation histories is key to understand how galaxies, in particular massive galaxies, were assembled. This topic is intensively investigated, thanks to new capabilities of telescopes and new numerical simulations with unprecedented high spatial resolution. The connection between galaxy interactions and nuclear activity has also been discussed. Simulations have shown that galaxy collisions trigger gas inflows which can feed an active galactic nucleus and nuclear starburst. Although evidence for gas inflows on galactic scales has been discovered in neutral and ionized gas, there have been few observational confirmations of gas inflows at scales smaller than 100 pc. I will introduce examples of recent observational studies on local mergers, including our project using ALMA data of the Antennae galaxies, and discuss the impact of galaxy interactions on star formation and nuclear activity.