



The life cycle of dust in galaxies

Rens Waters

*Astronomical Institute, University of Amsterdam,
Kruislaan 403, NL-1098 SJ Amsterdam*

The term dust is used for small, sub-micron sized solid particles that are ubiquitous in interstellar space. We know that dust formed very early in the history of the universe, perhaps shortly after the first generation of stars died and produced the metals to form dust. Dust plays an important role in the life of galaxies since it influences the thermal balance in the interstellar medium and it provides surface for chemical reactions. Dust is produced in the outflows of evolved stars and is the building block of new generations of stars and planets. The talk will focus on new insights into the way stars produce dust and how it ends up in young stars and planetary systems such as our own.