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## *Animazione di Particelle*

The term particle system refers to a computer graphics technique that uses a large number of very small sprites or other graphic objects to simulate certain kinds of "fuzzy" phenomena, which are otherwise very hard to reproduce with conventional rendering techniques - usually highly chaotic systems, natural phenomena, and/or processes caused by chemical reactions.

Examples of such phenomena which are commonly replicated using particle systems include fire, explosions, smoke, moving water (such as a waterfall), sparks, falling leaves, clouds, fog, snow, dust, meteor tails, stars and galaxies, or abstract visual effects like glowing trails, magic spells, etc. - these use particles that fade out quickly and are then re-emitted from the effect's source. Another technique can be used for things that contain many strands - such as fur, hair, and grass - involving rendering an entire particle's lifetime at once, which can then be drawn and manipulated as a single strand of the material in question.

Particle systems may be two-dimensional or three-dimensional.