Modelling and control of flexible robots

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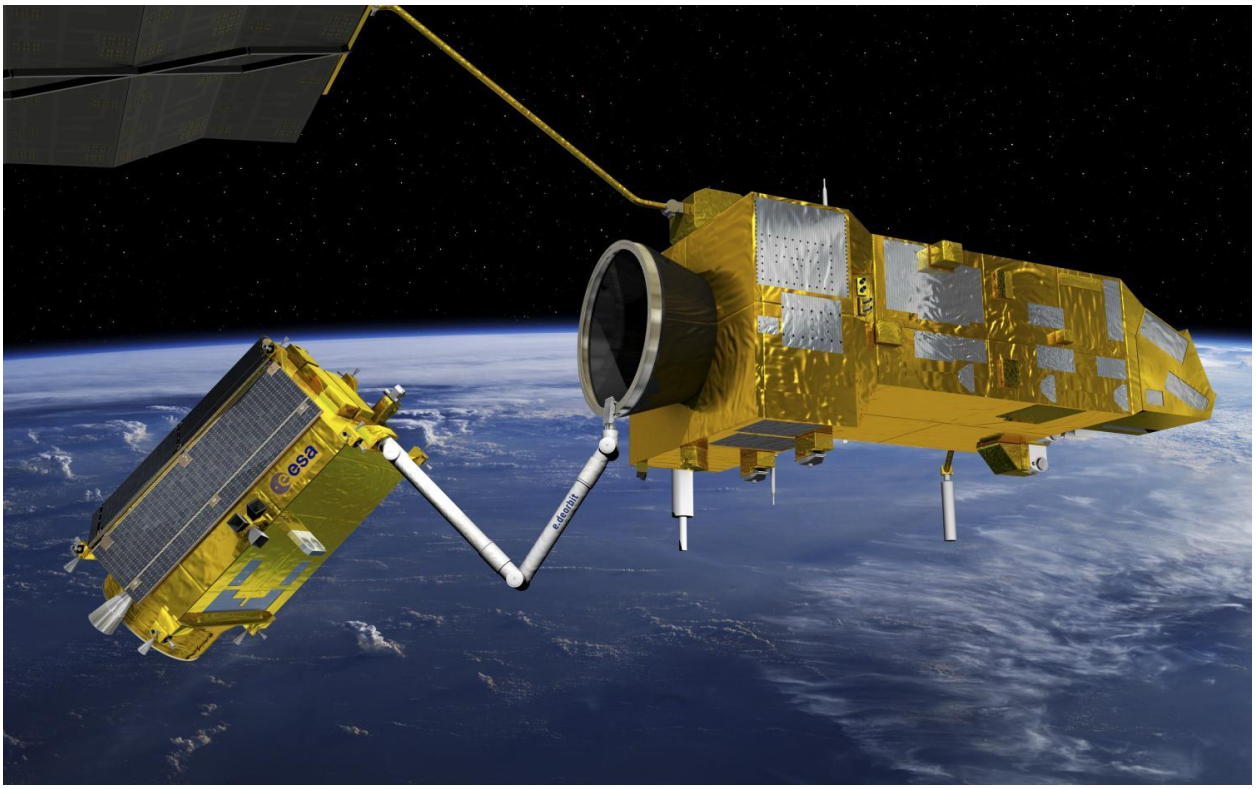

Photo Credit: European Space Agency (ESA).

One of the major constraint for robots used in spatial applications is that they have to be light. The lighter a robot is, the more flexible behaviours will be important. The picture shows an ESA space mission where a robotic arm is employed in a rendezvous scenario. Expecially in tasks where contact with external bodies takes place, the control law needs to be designed taking into accout flexible behaviours. Our research focuses on the modelling and control of flexible robots using functional analysis mathematical tools.

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