

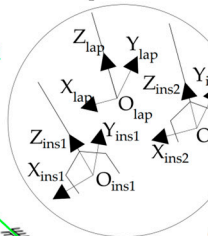
Kinematic scheme of the PARA-SILSROB robot

Kinematic chain 2  
(PCRRS-PCRR)

Kinematic chain 1  
(PCRRS-PCRR)

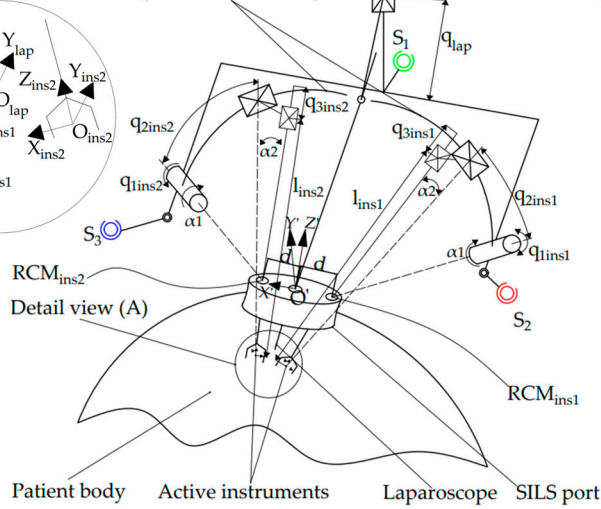
Kinematic chain 3  
(PCRRS-PCRR)

Detail A—active instrument tip coordinates

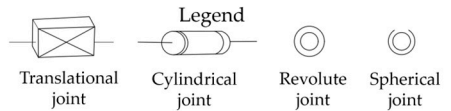


Mobile platform detail view  
Guiding module with 3-DOF  
(active instruments)

Insertion module with 1-DOF (laparoscope)



Detail view (A)



Patient body    Active instruments and laparoscopic camera    Mobile platform