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An integrated control scheme for space robot after capturing non-cooperative target

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#### ACCEPTED MANUSCRIPT

# Highlights:

- 1. Dynamic equations of space robot in operational space were derived.
- 2. Elementary functions were used to delineate the target's detumbling path.
- 3. A coordination control scheme was implemented both for base and end-effector.
- 4. Target mass properties were estimated during detumbling process.

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