

Reviewer #1

This manuscript proposed two modified methods to overcome the unstable of the classical IFF control in rotating platforms due to the gyroscopic effects, namely adding a high pass filter to the pure integrators and springs in parallel with the actuators and force sensors.

The improvement of active damping control is more obvious. However, there are several issues to be addressed before the reviewer could recommend it for publication.

Dear reviewer, thank you for your helpful comments. They were very effective in improving the quality of the manuscript. We have addressed them in the paper.

The introduction needs to be improved, this manuscript lacks recent references, especially lacks systemically references about active damping control for rotating mechanical systems with gyroscopic effects, backgrounds and prospects of engineering application.

The introduction has been completely reworked. Many references have been added about practical applications, active damping techniques and modified schemes of IFF.

Equation references in the manuscript are not standard, such as when authors mention equation (3) page 3 should be written as Eq. (1).

Suggest authors check all equation references.

Thank you for noticing this inconsistency in the references. All references have been checked and modified accordingly.

The authors should lay out Figure 13 in section 5, such as background, main usage to this example, and the annotation of key components in Figure 13.

The authors do agree that Figure 13 should be precisely annotated. However, it has been decided to remove this Figure in order to render the paper a little bit more concise as advised by reviewer #2.