## Methods of Adjustment used in the Controls Prototype Mode Cleaner Suspension at Caltech

# VERTICAL PITCH, ROLL and YAW LONG, TRANSVERSE and YAW

Calum Torrie, CALTECH Mike Perreur-Lloyd UNI of GLASGOW

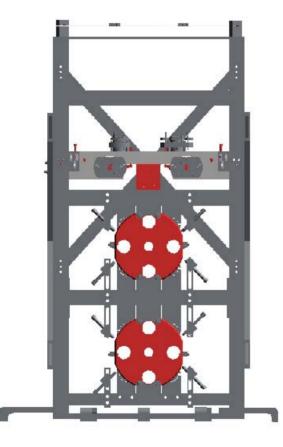
ALUK GLASGOW MEETING AUGUST 2003

LIGO-G030388-02

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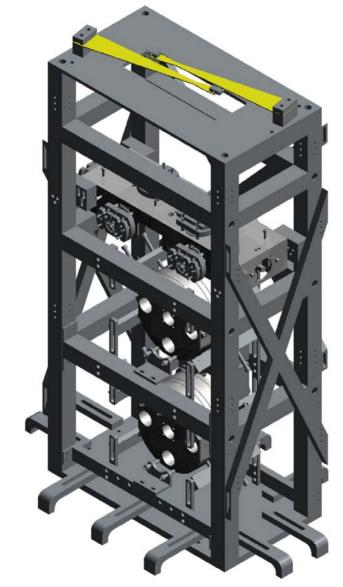
### **MODE CLEANER SUSPENSION**

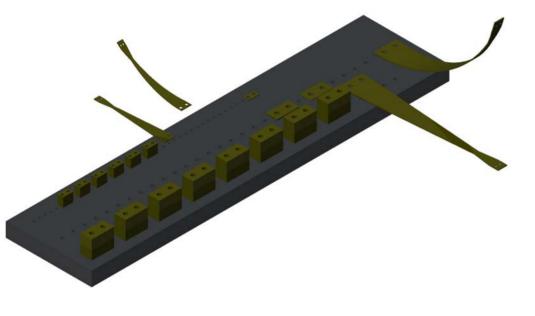




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**UPPER CANTILEVER BLADES** 

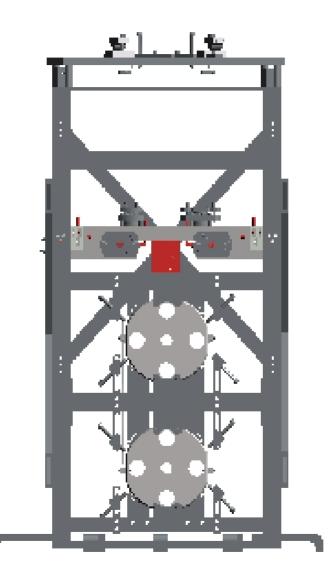






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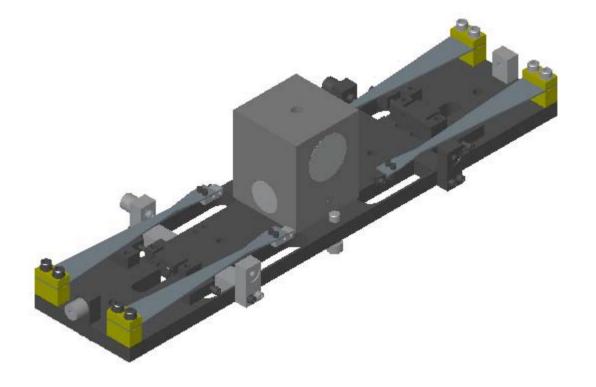
4 LIBRARY OF CLAMPS



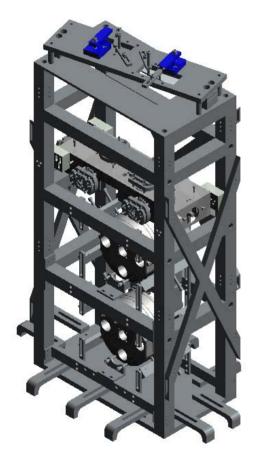
<sup>5</sup> UPPER MASS, 3kg

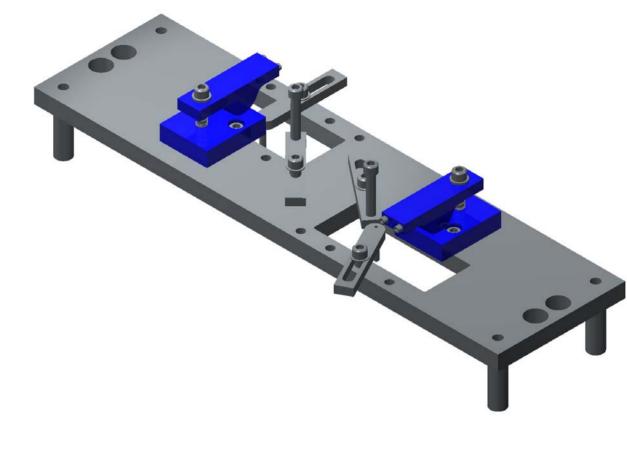
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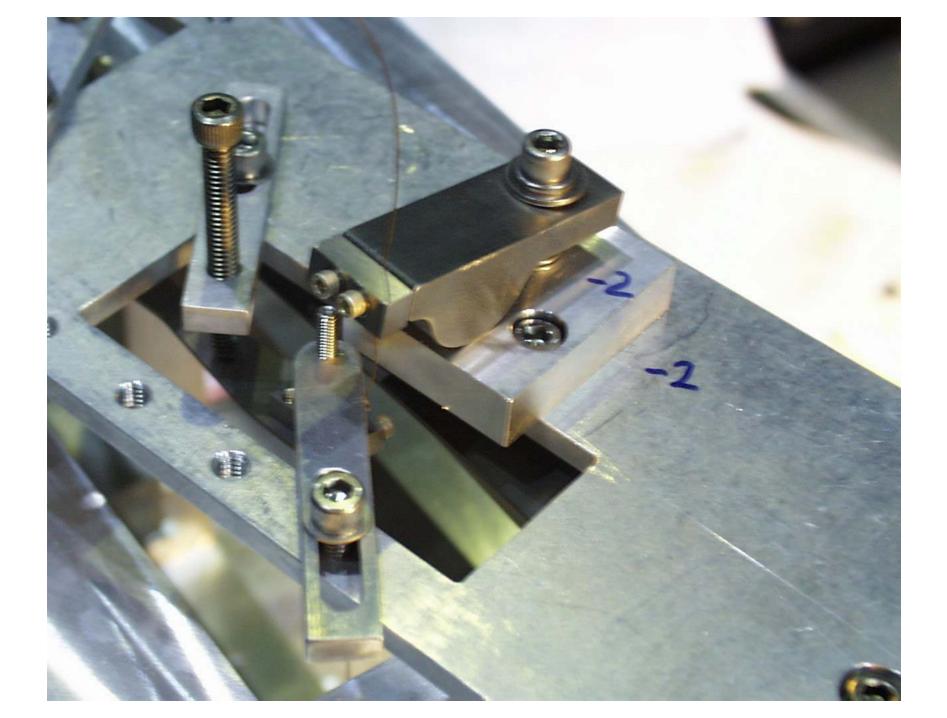
#### ALUKGLA0034aAUG03 6 LOWER CANTILEVER BLADE CLAMPS

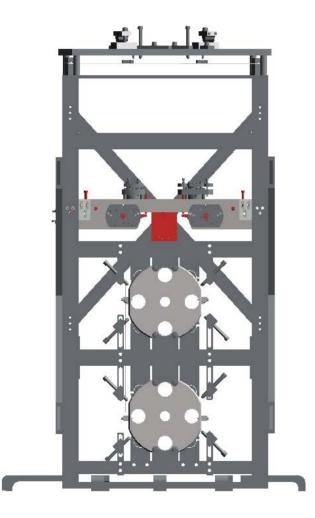


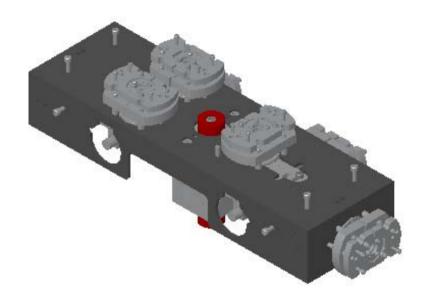


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UPPER WIRE WINCH (SHORTEN ONLY)





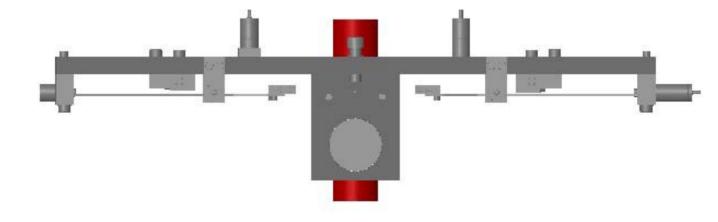




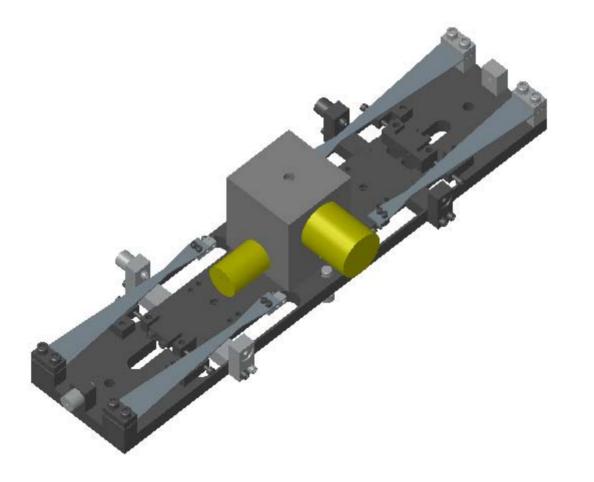
ALUKGLA0034aAUG03 10 FIXED MASS ON UPPER MASS

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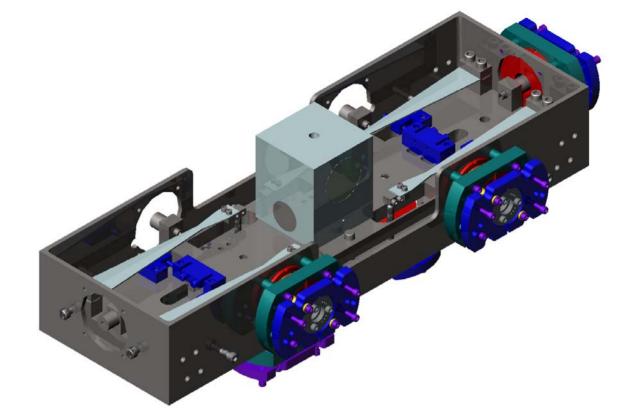






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12 **CRUDE PITCH & ROLL ADJUSTMENT** 

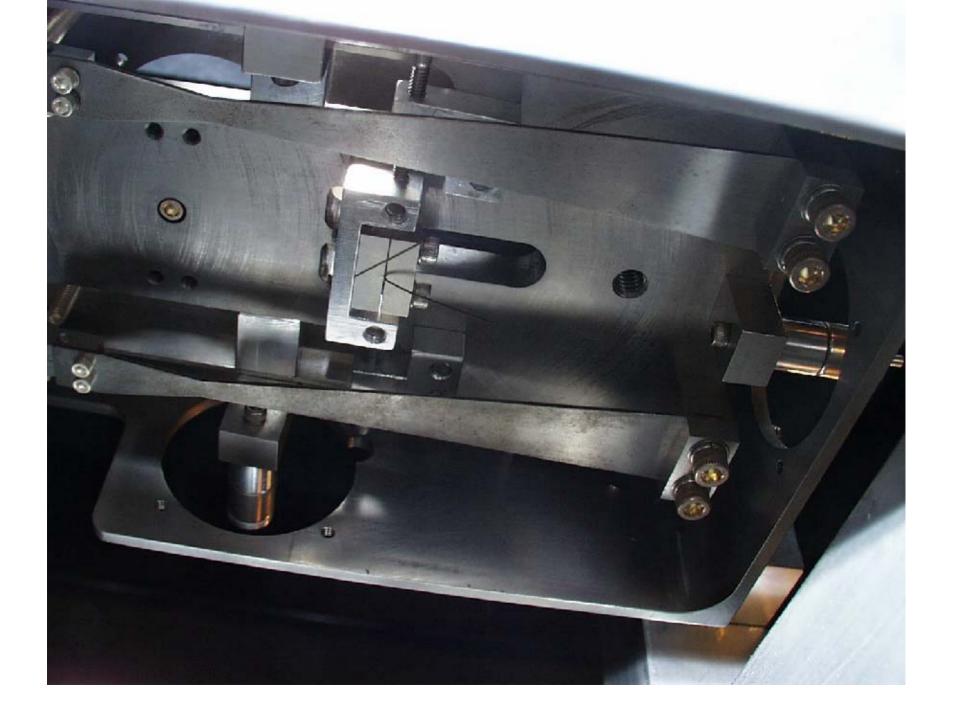






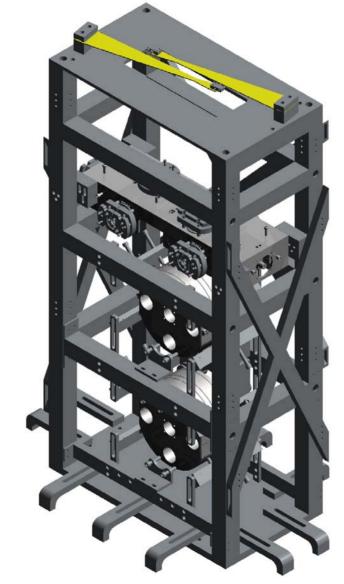
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FINE PITCH ADJUSTMENT

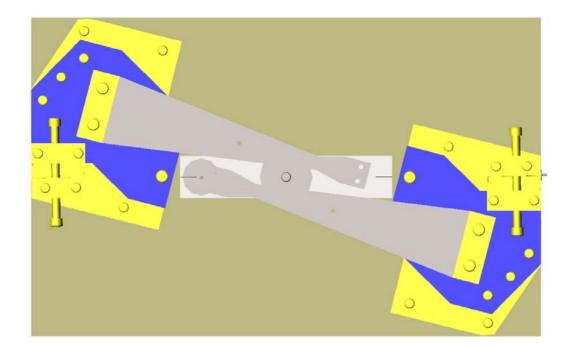
13



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**UPPER CANTILEVER BLADES** 

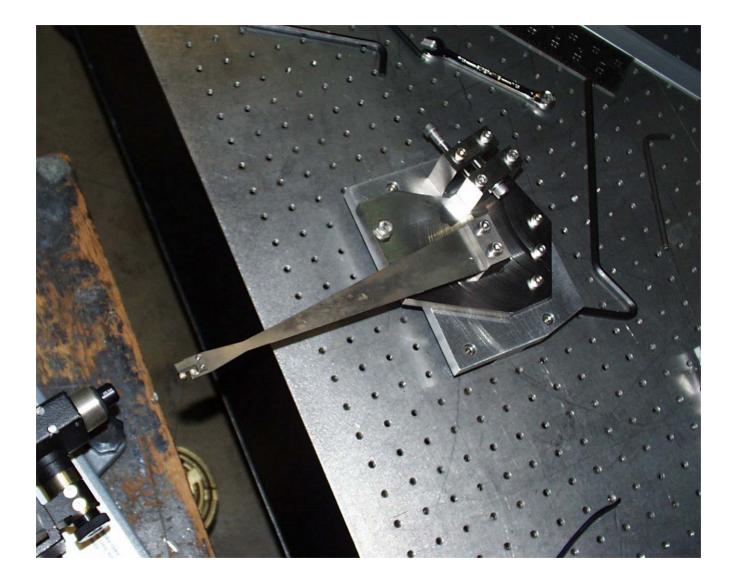






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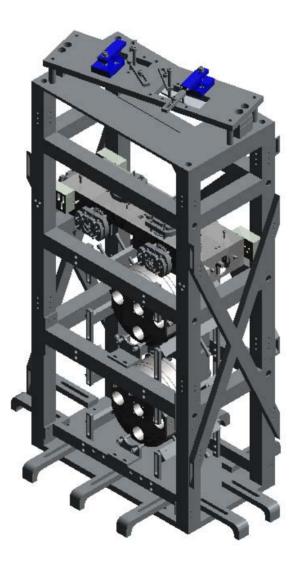


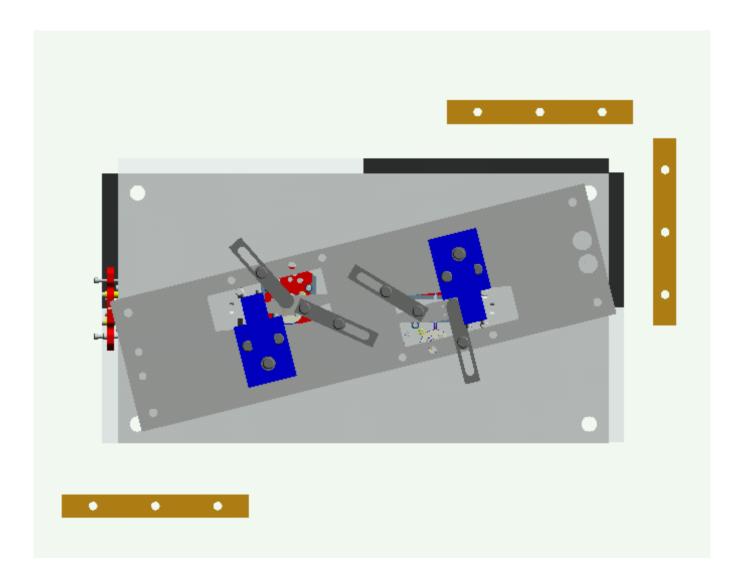


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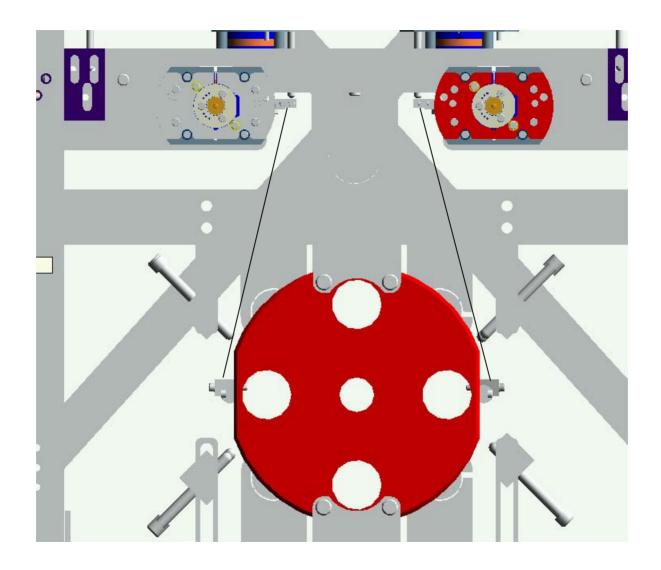
17

**PROTOTYPE YAW ADJUSTMENT** 

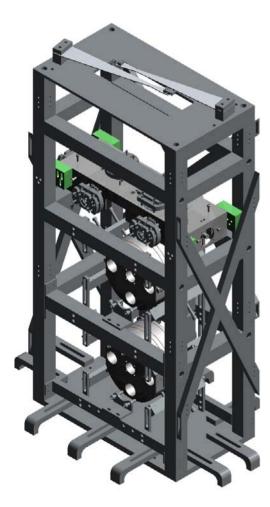


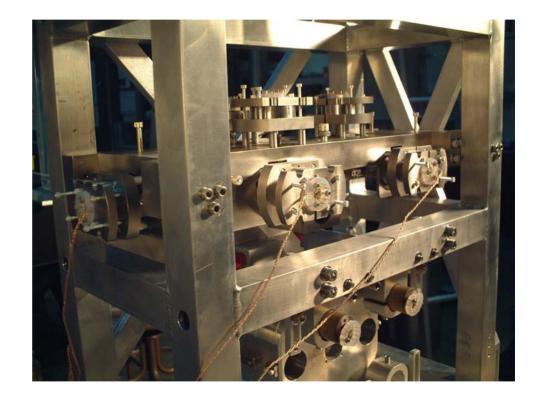


#### ALUKGLA0034aAUG03 STRUCTURE ADJUSTMENT



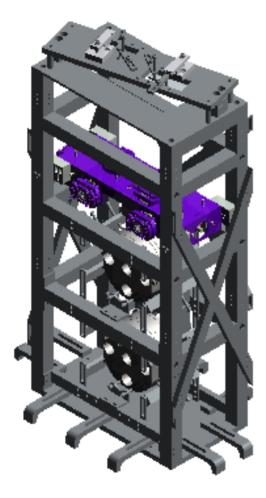
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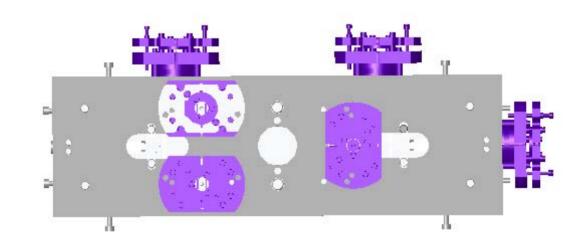




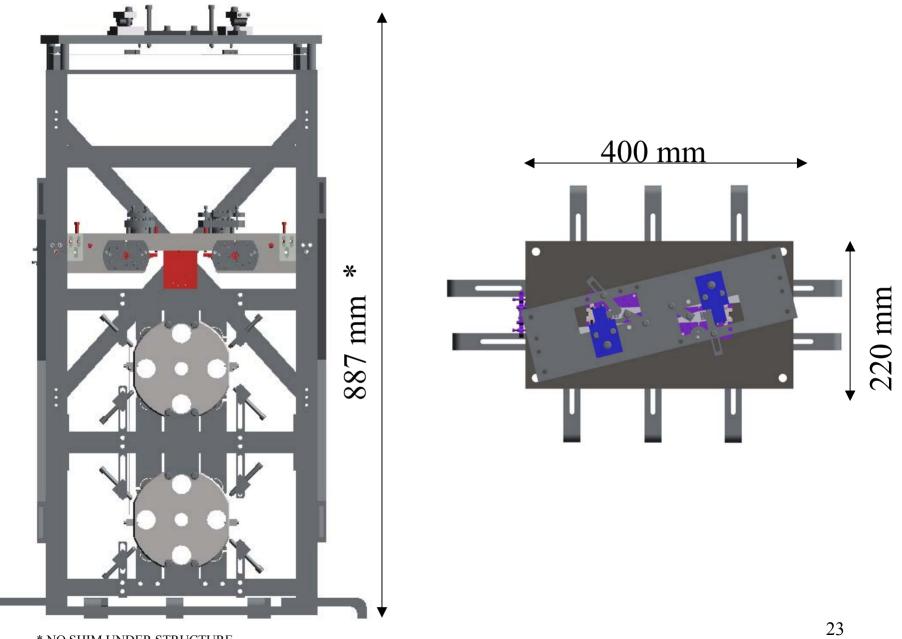
#### ALUKGLA0034aAUG03 21 ADJUSTMENT OF TABLECLOTH

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SWITCH TO TALK ON COILS & ECDs



\* NO SHIM UNDER STRUCTURE

MODE CLEANER SUSPENSION