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| Date Assigned: 7/1/15  Date Returned: 7/8/15 | Project Leader:  Dante Archangeli | Oversight:  Phil Piper |
| **Project Title:**  Planetary Mounting Bracket | **Project System:**  Drivetrain | **Projected Budget:** $10 (mat, fab, HW) |
| **Projected timeline:**  A total of 10 research hours, 10 design hours, 2 install hours split over 2 weeks for fabrication and install, | | |
| **Project Team:** Dante Archangeli [dante.archangeli@yale.edu](mailto:dante.archangeli@yale.edu) | | |

**Brief Description:**

These 4130 steel tabs will mount the planetary to the space frame. They will weld to the chassis and bolt to the planetary. They will be designed to transmit loads to nodes as opposed tube middle to avoid bending forces. We will keep the weight to a minimum, but will stress strength and stiffness over weight.

**Design Criteria:**

* Must support torque (4\*160Nm) output and forces (1.5g\*mass) caused by acceleration of and braking with a maximum deflection of .01mm and factor of safety of 2.
* Must weld to the chassis and allow for bolting to the planetary.
* Must hold the bearing for the axle/cv joints.
* Must allow easy assembly and disassembly