Intensity Frontier Program Budget Justification

**Cumulative - 3 years**

* **Senior Personnel**: Two months summer salary for Yu and Asaadi is requested at the current rate of $121,607 and $84,460, respectively. This request includes a canonical 4% cost of living adjustment is applied in subsequent years. The fringe benefit rate is 30% of the request. The total request for this item is $185,572. The indirect rate for this item is the agreed on-campus rate of 51.5%.
* **Postdoctoral Researcher**: A request for one postdoctoral fellow is made using the base salary of $53,000 per annum for the first year and a canonical 4% cost of living adjustment is applied in subsequent years. The fringe benefit rate is 30% of the request. The total requested amount for this item is $215,078. Since it is anticipated to have the postdoctoral fellow 50% on campus and 50% off campus for tasks at Fernilab the first and the second year, the indirect rate for this cost is 51.5% on-campus and 26% off-campus for the relevant portion of the cost. The third year salary are expected to be 100% off-campus due to activities at Fermilab. Currently, Dr. Animesh Chatterjee who has been with our group for 26months will be supported through these funds.
* **Graduate Students**: Support for a total of two graduate students is requested at the base rate of $24,000 each per annum for the first year and a canonical 4% cost of living adjustment is applied in subsequent years. The fringe benefit rate is 10% of the request. The total request for this item is $164,820 for both, $82,410 each. Since it is anticipated to have these graduate student 50% on-campus and 50% off-campus for tasks at Fermilab first year, the indirect rate for this cost is 51.5% on-campus and 26% off-campus for the relevant portion of the cost. This proportion changes as their research progress through year 2 and year 3, properly reflected into the relevant portion of the indirect rates.
* **Travel and Cost of Living Adjustment**: The total request amount for this item for the three years is $60,200 of which $43,600 is for domestic travel, including COLA of the total $27,000 at the rate of $450 per month for a postdoctoral fellow and $300 per month for a graduate student. This item also includes the foreign travel request of $16,600.
* **STEM Tuition**: Graduate student tuition support for one student is request at the rate of $9,140 per annum, totaling $54,840. This cost does not incur indirect cost.
* **M&S**: A modest maintenance and services cost is requested to support various costs, totaling $1,897. This request is subject to on-campus indirect rate of 51.5%.
* **Total direct cost** is $682,408.
* **The total indirect** cost computed using the proportion of the on-campus (51.5%) and off-campus (26%) described above is $247,592.
* **Grand Total** for the three-year period: The grand total request for the three year period is $930,000.

**Yearly – Year 1**

* **Senior Personnel**: Two months summer salary for Yu and Asaadi is requested at the rate of of $121,607 and $84,460, respectively. The fringe benefit rate is 30% of the request. The total request for this item is $59,529. The indirect rate for this item is the agreed on-campus rate of 51.5%.
* **Postdoctoral Researcher**: A request for one postdoctoral fellow is made using the base salary of $53,000per annum. The fringe benefit rate is 30% of the request. The total requested amount for this item is $68,900. Since it is anticipated to have the postdoctoral fellow 50% on-campus and 50% off campus for tasks at Fernilab, the indirect rate for this cost is 51.5% on-campus and 26% off-campus for the relevant portion of the cost.
* **Graduate Students**: Support for a total of two graduate students is requested at the base rate of $24,000 each per annum, totaling $48,000. The fringe benefit rate is 10% of the request. The total request for this item is $52,800 for both. Since it is anticipated to have both of these graduate student 50% on-campus and 50% off-campus for tasks at Fermilab, the indirect rate for this cost is 51.5% on-campus and 26% off-campus for the relevant portion of the cost.
* **Travel and Cost of Living Adjustment**: The total request amount for this item is $21,500 of which $13,900 is for domestic travel, including COLA of the total $6,300 at the rate of $450 per month for a postdoctoral fellow and $300 per month for a graduate student. This item also includes the foreign travel request of $7,600 to support activities at CERN. All travel costs are subject to on-campus rate indirect rate of 51.5%, except for COLA which is subject to 26% off-campus rate.
* **STEM Tuition**: Graduate student tuition support for one student is request at the rate of $9,140 per annum, totaling $18,280. This cost does not incur indirect cost.
* **M&S**: A modest maintenance and services cost is requested to support various costs, totaling $1,128. This request is subject to on-campus indirect rate of 51.5%.
* **Total direct cost** is $222,137.
* **The total indirect** cost computed using the proportion of the on-campus (51.5%) and off-campus (26%) described above is $87,863 - $70,404 on-campus and $17,459 off-campus.
* **Grand Total** :The grand total request for this period is $310,000.

**Yearly – Year 2**

* **Senior Personnel**: Two months summer salary for Yu and Asaadi is requested at the rate of of $126,471 and $87,838, respectively. The fringe benefit rate is 30% of the request. The total request for this item is $61,910. The indirect rate for this item is the agreed on-campus rate of 51.5%.
* **Postdoctoral Researcher**: A request for one postdoctoral fellow is made using the base salary of $55,120per annum. The fringe benefit rate is 30% of the request. The total requested amount for this item is $71,656. Since it is anticipated to have the postdoctoral fellow 50% on-campus and 50% off campus for tasks at Fernilab, the indirect rate for this cost is 51.5% on-campus and 26% off-campus for the relevant portion of the cost.
* **Graduate Students**: Support for a total of two graduate students is requested at the base rate of $24,960 each per annum, totaling $49,920. The fringe benefit rate is 10% of the request. The total request for this item is $54,912 for both. Since it is anticipated to have one of these graduate students is 50% on-campus and 50% off-campus while the other is 100% off-campus for tasks at Fermilab, the indirect rate for this cost is 51.5% on-campus and 26% off-campus for the relevant portion of the cost.
* **Travel and Cost of Living Adjustment**: The total request amount for this item is $18,100 of which $13,100 is for domestic travel, including COLA of the total $8,100 at the rate of $450 per month for a postdoctoral fellow and $300 per month for a graduate student. This item also includes the foreign travel request of $5,000. All travel costs are subject to on-campus rate indirect rate of 51.5%, except for COLA which is subject to 26% off-campus rate.
* **STEM Tuition**: Graduate student tuition support for one student is request at the rate of $9,140 per annum, totaling $18,280. This cost does not incur indirect cost.
* **M&S**: A modest maintenance and services cost is requested to support various costs, totaling $302. This request is subject to on-campus indirect rate of 51.5%.
* **Total direct cost** is $225,160.
* **The total indirect** cost computed using the proportion of the on-campus (51.5%) and off-campus (26%) described above is $84,840 - $61,711 on-campus and $22,129 off-campus.
* **Grand Total**: The grand total request for this period is $310,000.

**Yearly – Year 3**

* **Senior Personnel**: Two months summer salary for Yu and Asaadi is requested at the rate of $131,530 and $91,352, respectively. The fringe benefit rate is 30% of the request. The total request for this item is $64,133. The indirect rate for this item is the agreed on-campus rate of 51.5%.
* **Postdoctoral Researcher**: A request for one postdoctoral fellow is made using the base salary of $57,325per annum. The fringe benefit rate is 30% of the request. The total requested amount for this item is $74,522. Since it is anticipated to have the postdoctoral fellow 100% off campus for tasks at Fernilab, the indirect rate for this cost is 26% off-campus.
* **Graduate Students**: Support for a total of two graduate students is requested at the base rate of $25,958 each per annum, totaling $51,917. The fringe benefit rate is 10% of the request. The total request for this item is $57,109 for both. Since it is anticipated to have both of these graduate student 100% off-campus for tasks at Fermilab, the indirect rate for this cost is 26% off-campus for the relevant portion of the cost.
* **Travel and Cost of Living Adjustment**: The total request amount for this item for the three years is $20,600 of which $16,600 is for domestic travel, including COLA of the total $12,600 at the rate of $450 per month for a postdoctoral fellow and $300 per month for a graduate student. This item also includes the foreign travel request of $4,000. All travel costs are subject to on-campus rate indirect rate of 51.5%, except for COLA which is subject to 26% off-campus rate.
* **STEM Tuition**: Graduate student tuition support for one student is request at the rate of $9,140 per annum, totaling $18,280. This cost does not incur indirect cost.
* **M&S**: A modest maintenance and services cost is requested to support various costs, totaling $467. This request is subject to on-campus indirect rate of 51.5%.
* **Total direct cost** is $235,111.
* **The total indirect** cost computed using the proportion of the on-campus (51.5%) and off-campus (26%) described above is $74,889 - $37,389 on-campus and $37,500 off-campus.
* **Grand Total**: The grand total request for this period is $310,000.