**Ongoing external funding**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Project title** | **Funding source** | **Amounts Euro (SEK)** | **Period** | **Role of the PI** | **Relation to current proposal** |
| Discovery strategies for DM and new phenomena in hadronic signatures with the ATLAS detector at the LHC | European Research Council | 1270000 | 2016-2021 | Sole PI | Proof-of-principle results for WP1-3, see end of this document for how this Consolidator Grant is a significant step beyond this Starting Grant. |
| Real-time Strategies and Precision Searches for Dark Sector Particles | VR (Swedish Research Council) | 423020 (4400000) | 2019-2024 | Sole PI | Covering PI’s salary and salary of PhD student. The PhD student will be spending 30% of their time on the development of machine learning algorithms for Run-2 dark sector searches until 2022. The majority of the work of the PhD student in 2021-2024 will be on the hardware for the ATLAS experiment upgrade and on the LDMX experiment, unrelated to this proposal. |
| INSIGHTS | MSCA | [amount] | 2017-2021 | Co-PI and co-supervisor of an Early Stage Researcher | None |

**On-going and submitted grant applications**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Project title** | **Funding source** | **Amounts Euro (SEK)** | **Period** | **Role of the PI** | **Relation to current proposal** |
| Synergies between machine learning, real-time analysis and hybrid architectures for efficient event processing and decision making (SMARTHEP) | MSCA | [amount] | 2016-2021 | Coordinator | LHC-wide and industrial applications of real-time analysis techniques (not covered in this proposal) |

**Previous external funding**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Project title** | **Funding source** | **Amounts Euro (SEK)** | **Period** | **Role** | **Relation to current proposal** |
| Searches for DM and New Phenomena with the ATLAS detector at the Large Hadron Collider and beyond. | VR (Swedish Research Council) | 230760 (2400000) | 2015-2018 | Sole PI | None |

[Discuss the success of the StG and how this enables the CoG]

This Consolidator grant is a **natural extension of my research program, significantly expanded in ambition and experimental coverage**. It extends real-time analysis as the stepping stone to new, more sensitive DM searches with broad theoretical motivations. It enables my research group and the ATLAS DM search community to make a major contribution to the global DM landscape.

This grant would establish me further as a leader in my field and responsible for a research program with implications beyond high energy physics.