'I am ATLAS' Project Report

Goal

Although people within ATLAS understand that it is an experiment made up of many components, including the detector, humans, and intangible resources, outside of the High Energy Physics Community ATLAS is primarily associated with the detector alone. The aim of this project was to create outreach materials that highlighted the fact that ATLAS is made up of many different people and things which are all equally ATLAS.

A secondary goal of the project was to create evergreen content that could be reused and remixed into future projects. To that aim, the project has been designed with the opportunity for updates in mind, so that it can be expanded if having more profiles would be useful and updated as ATLAS changes over time. Likewise, the content has been created with the intention that it could easily be adapted to other formats.

Execution

To fulfill these goals I created a structure in which people and objects could be 'profiled' using the same set of basic interview questions. These questions were aimed to get a little bit of biographical information, including the origin of people/objects, and a basic explanation of how one individual contributes to ATLAS. I focused on individual contributions both because they're more concrete (and therefore easier for the public to understand) and also because then length of these profiles required a narrow focus. Each one should also connect to other partners within ATLAS, and together the cards should create a picture of the range of objects.

I then interviewed human members of the ATLAS collaboration and selected objects to write interviews with, with the goal of finding subjects in a variety of roles with ATLAS. After interviewing humans, I condensed the interviews to fit into the format of this project and to focus on the goals and tone chosen for the overall project. For the objects, my primary information sources were ATLAS outreach materials, technical reports, and interviews, and I put that information together to try to personify the objects in an engaging but accurate way.

Finally, I created templates for the profiles in two formats: A4 sized signs and A5 (/half-sheet) sized cards. These templates were created in Microsoft PowerPoint, as a piece of software that can create nice graphic signs but wouldn't require anyone creating future updates to the project to have access to software that's less widely available, like Adobe software packages.

Challenges

As I expected, interviews with humans turned out to be the most challenging portion of the project and would be the most difficult part of expanding the project. Getting usable answers, both in content and length, was challenging, and all the interviews in the final project were heavily edited for length. Interviews are particularly tricky with subjects who aren't used to speaking to the public about their work or aren't fluent English speakers.

Although these challenges weren't out of the ordinary or particularly significant for me, I realize that that may not be the case for someone who wants to add to the project in the future. I experimented a little with email interviews as an alternative format that might be a simpler alternative. Email interviews generally get less natural and engaging quotes, but this

isn't always the case—in fact, in some of the situations mentioned above it could lead to better ones. I think a hybrid combination of some time to think about answers ahead of time with a conversation where an interviewer could probe answers or help with explanations would be preferable than a purely email-based interview.

While the 'interviews' with non-human components were easier because I could make them say whatever I wanted to, they presented some challenges as well. Selecting which subcomponent of a system to select was a matter of both taste and pragmatism, and key to writing a successful profile.

The usual challenges of trying to very briefly explain how complex systems work in an approachable way, and the necessary simplifications and omissions that requires, were present, but as those are present in almost any project explain ATLAS to the public I don't think they're particularly significant. Another, perhaps more unique, challenge was the fact that not all objects could give neat answers to the questions. The one most often challenged by this was the question of where an object comes from. Not all objects have this easily document—some are equally likely to have been made by multiple institutes or in multiple places, or may not have simple answers on the origins of specific components made fifteen years ago. While I think this can be seen as a feature, because it tells the public a lot of how particle physics works in practice, it's not as neat a story as one might like. (This can be the case with humans as well though, so perhaps this would have relevance to interviews as well if enough were conducted).