

Snowmass2021 Letter of Interest : Accessibility

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Thematic Areas:

- CommF1: Applications & Industry
- CommF2: Career Pipeline & Development
- CommF3: Diversity & Inclusion
- CommF4: Physics Education
- CommF5: Public Education & Outreach
- CommF6: Public Policy & Government Engagement

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Abstract: This is a group-written contribution pertaining to the topic of how particle physics can become a more accessible field. It should be noted that this has already been investigated in the context of Snowmass2021 in anticipation of the many virtual and in person meetings during the next year.

Elements of Interest :

- Communication deaf/hard of hearing, language barriers, internet connection
- Physical accessibility of venues
- Financial barriers (“haves” and “have nots”)
- Whether the collaborative tools/platforms we use cause for individuals to be marginalized

General Description :

Particle physics has become increasingly community driven, relying on consensus-building to understand where to best apply the limited resources that exist to gain the greatest insight into the natural world. This is done most effectively when the largest number of voices is heard as this allows ideas and results to be critiqued from more perspectives which in turn leads to a more robust result. However, there exist a number of barriers that exist which creates impedance within the community and makes it difficult for some members to collaborate as effectively as others. Furthermore, there are further barriers which exist between the particle physics community and “the outside world” that makes it challenging or impossible for individuals to enter into the field and begin collaborating. These barriers can exist due to physical disabilities pertaining to mobility, thereby impairing ones ability to as effectively participate in in-person conferences. There also exist physical accessibility needs pertaining to communication in the case that an individual is deaf or hard of hearing or has impaired vision or is colorblind. Beyond these physical limitations, cultural barriers can exist to collaboration and professional advancement that derive from the dominant language of published science being English and the facilities in the US adhering to Western customs and using technologies that are intrinsically linked to social issues elsewhere in the world. Finally, barriers exist that pertain to the structural imbalance of resources with which we carry out our research. This can range from the size of the institution, and subsequently the grant money, that is available to an individual to the bandwidth of their internet connection which prevents them from executing certain research capabilities or connecting to virtual meetings. In all cases, an inability to actively participate in the field if one so desires is bad for the field.

This LoI proposes to explore and document the myriad ways in which individuals are blocked from participating in the field of particle physics. It will gather and propose solutions that are contextualized for our field and outline clear guidelines that will feed into the “Recommendations for Funding Agencies” with the aim of providing mechanisms to empower individuals to more fully participate in the field.

Please note that a related document has been produced specifically pertaining to the accessibility of the ongoing snowmass process itself and is intended to provide guidance for the planning meetings - [Link to Accessibility Recommendations](#).