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Abstract for an Invited Paper
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Community input and update from Basic Energy Sciences Advisory Committee's Directing Matter and Energy Subcommittee

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BESAC has been charged to update its 2007 report Directing Matter and Energy: Five Challenges for Science and the Imagination, which depicts the science of controlling materials at the electronic, atomic, and molecular levels and represents a revolutionary view of 21st century fundamental science serving the BES community. This report outlined five grand challenges for basic science. These grand challenges, as explicated in the 2007 report, have proven to be a superb prod for the scientific community in the U.S. and beyond. The 46 Energy Frontier Research Centers, created by the Department Of Energy after acceptance of the grand challenge report, as well as the advances of the broader research community, have very effectively pursued the high bar that the five original grand challenges set. From the published results of research that was generated by the original grand challenges, we suggest new opportunities to advance our understanding and mastering of nature. These themes suggest transformational opportunities for energy science of the next decade and beyond. In this town hall, we will present the current status of this study and solicit community input in support of the effort. Additional background information is available at www.besac2014.com.