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Abstract for an Invited Paper
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Answering the Outstanding Questions of Solar Wind Physics¹

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We present our recent paper, Nine Outstanding Questions of Solar Wind Physics, which is a part of the Grand Challenges in Earth and Space Sciences series of the Journal of Geophysical Research. These questions synthesize input from the Heliophysics community and involve the formation of the solar wind, the inherent properties of the solar wind, and the evolution of the solar wind. The nine questions focus on (1) origin locations on the Sun, (2) plasma release, (3) acceleration, (4) heavy-ion abundances and charge states, (5) magnetic structure, (6) Alfvén waves, (7) turbulence, (8) distribution-function evolution, and (9) energetic-particle transport. We discuss the current state of research in the field of solar wind physics, an updated framework for discussing solar wind formation, as well as future needs and opportunities for progress.

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