Solar Wind from Coronal Holes

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We discuss the coronal heating and the solar wind acceleration by MHD waves in open field regions from a theoretical viewpoint. After we review roles of the waves in the heating and acceleration, we focus on physics at the solar surface which control solar wind speed at $\sim 1~\mathrm{AU}$.

We show that if Alfven waves are considered surface field strength and flux tube expansion become the control parameters, which is consistent with recent observations by the Solar Wind group in Nagoya STEL.