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# Macroscopic Model of Geomagnetic-Radiation from Air Showers, II

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The generic properties of the emission of coherent radiation from a moving charge distribution are discussed. The general structure of the charge and current distributions in an extensive air shower are derived. These are subsequently used to develop a very intuitive picture for the properties of the emitted radio pulse. Using this picture can be seen that the structure of the pulse is a direct reflection of the shower profile. At higher frequencies the emission is suppressed because the wavelength is shorter than the important length scale in the shower. It is shown that radio emission can be used to distinguish proton and iron induced air showers.

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