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On the Importance of Electromagnetic Dissociation for Cosmic Ray and Nuclear Transport Codes JOHN NORBURY, Worcester Polytechnic Institute — A relativistic nucleus-nucleus reaction is mediated by the Strong interaction when the nuclei collide, i.e. when they come closer than 1 fm. However if the nuclei miss each other, a reaction can still occur via the long range Electromagnetic force. This is often called Electromagnetic Dissociation (EMD). Some nuclear transport codes only include Strong interactions for the nucleus-nucleus reaction component. It will be shown that for certain nuclei and energies it is a bad approximation to ignore EMD.

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