Truncated long-range percolation on oriented graphs

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We consider different problems within the general theme of long-range percolation on oriented graphs. Our aim is to settle the so-called truncation question, described as follows. We are given probabilities that certain long-range oriented bonds are open; assuming that the sum of these probabilities is infinite, we ask if the probability of percolation is positive when we truncate the graph, disallowing bonds of range above a possibly large but finite threshold. We give some conditions in which the answer is affirmative. We also translate some of our results on oriented percolation to the context of a long-range contact process. Joint work with Aernout van Enter and Daniel Valesin.