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# w20_qBURST Results

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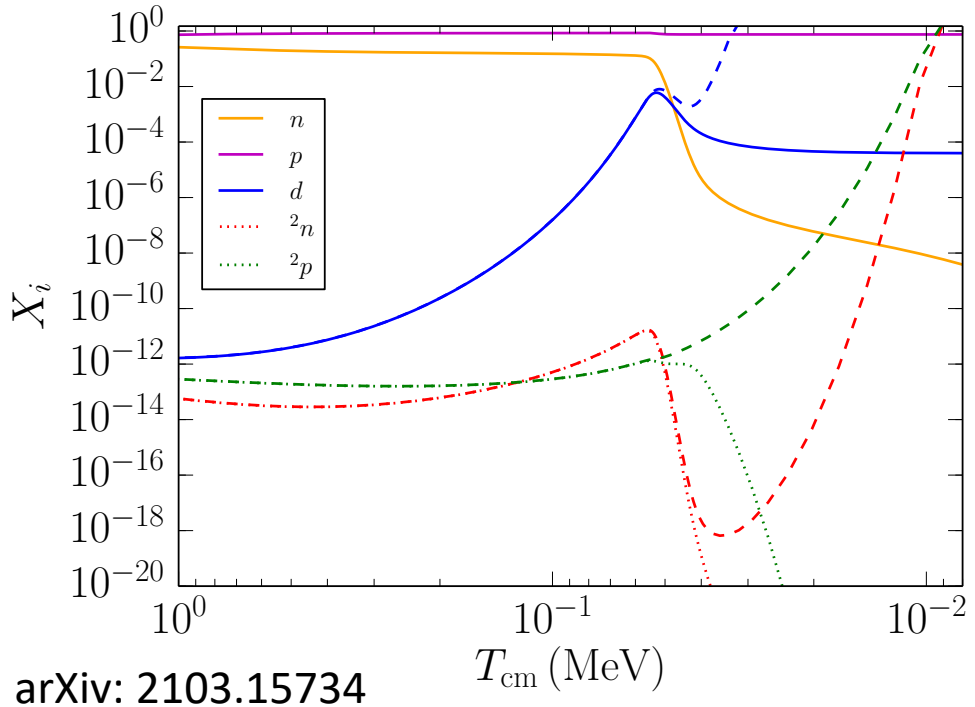
## Alternative BBN with diprotons and dineutrons

1. Add two new nuclides to nuclear network
2. Run network with weak interactions and capture reactions

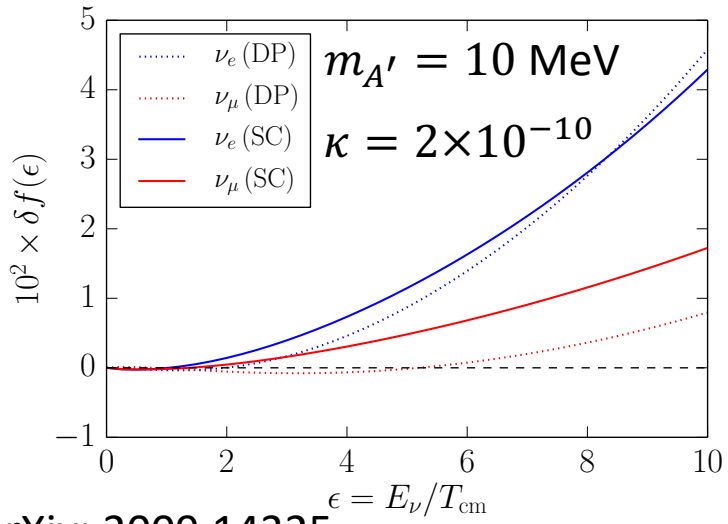
$$^2n(\nu_e, e^-)d(e^+, \overline{\nu}_e)^2p$$
$$^2n(p,n)d(p,n)^2p$$



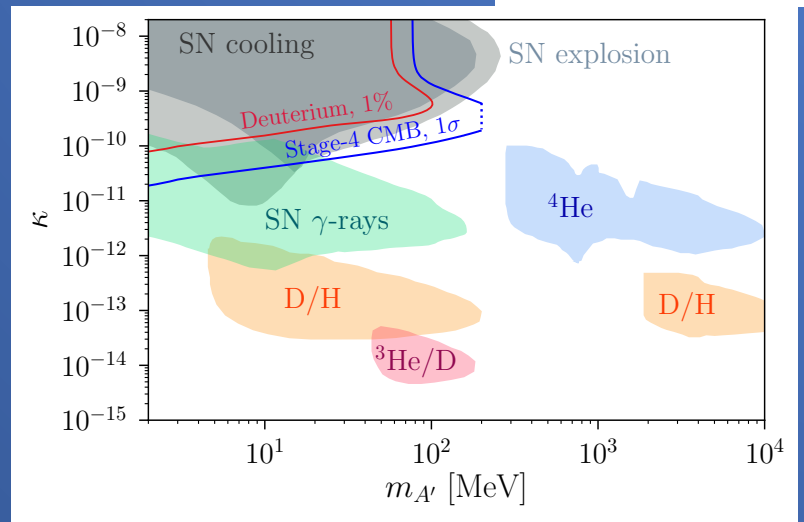

arXiv: 2103.15734

## Beyond Standard Model testing with Dark Photons

Evolve decaying particle number density with neutrino energy transport




arXiv: 2009.14325




Parameter space scan to place constraints