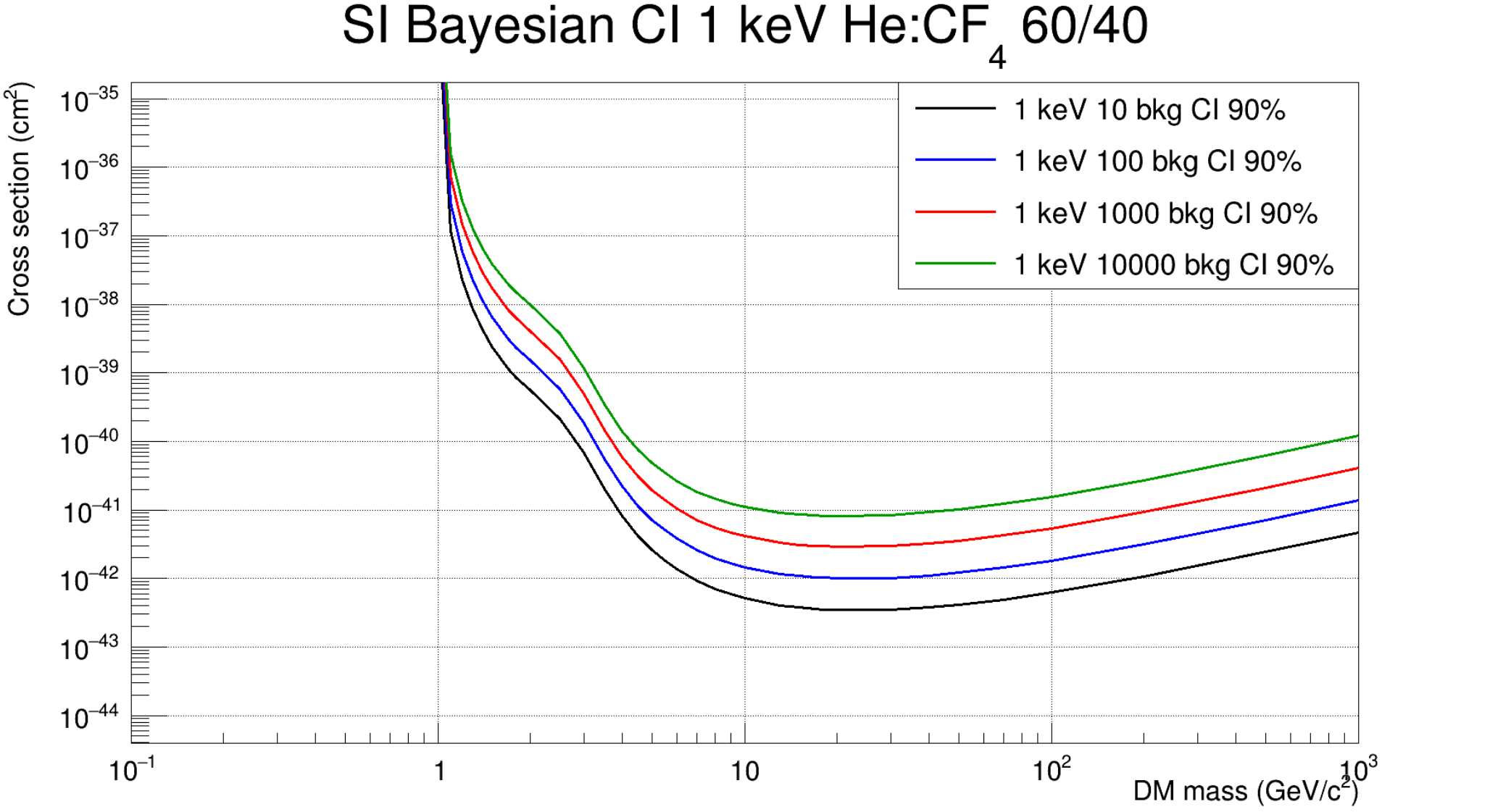
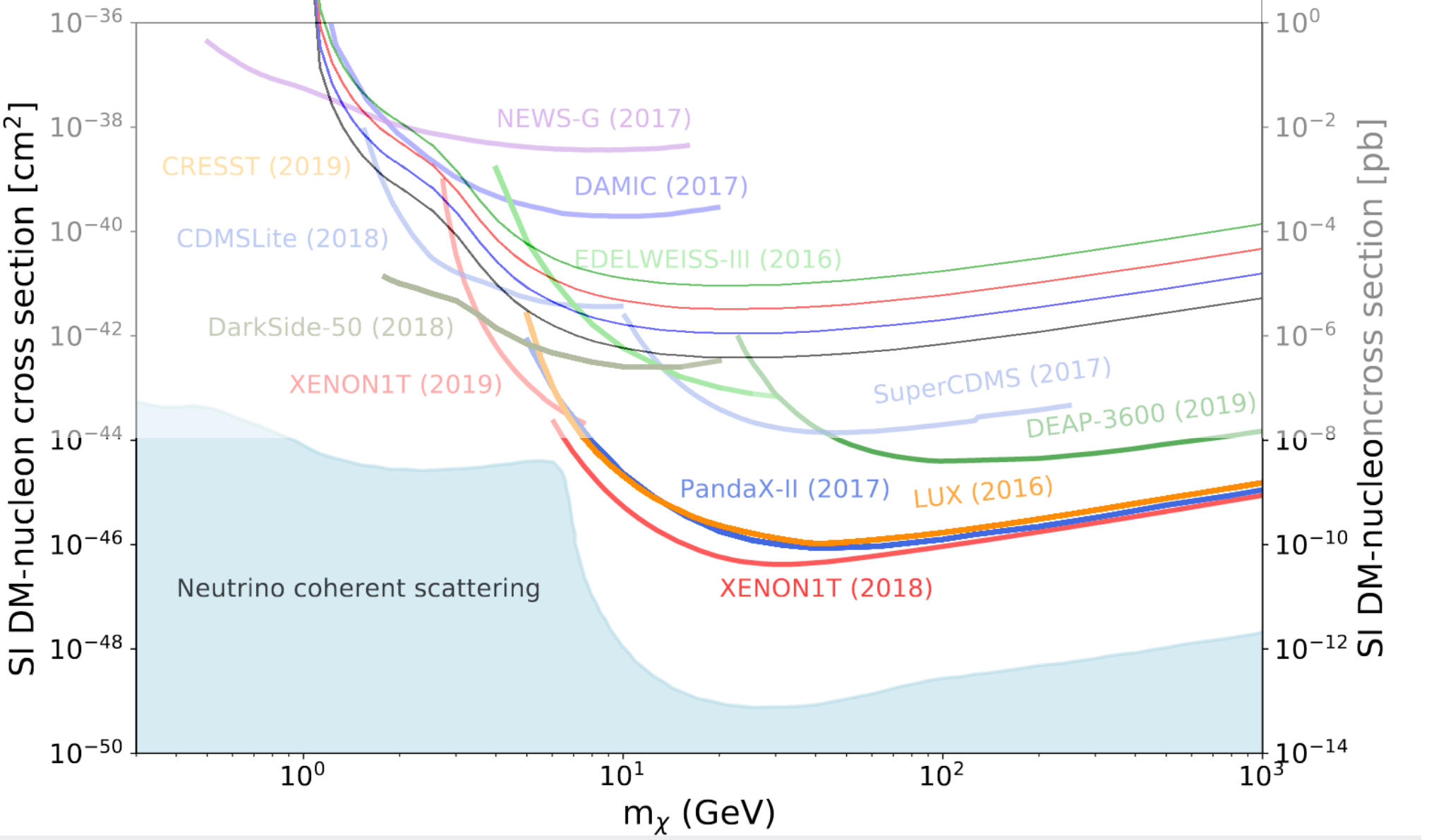
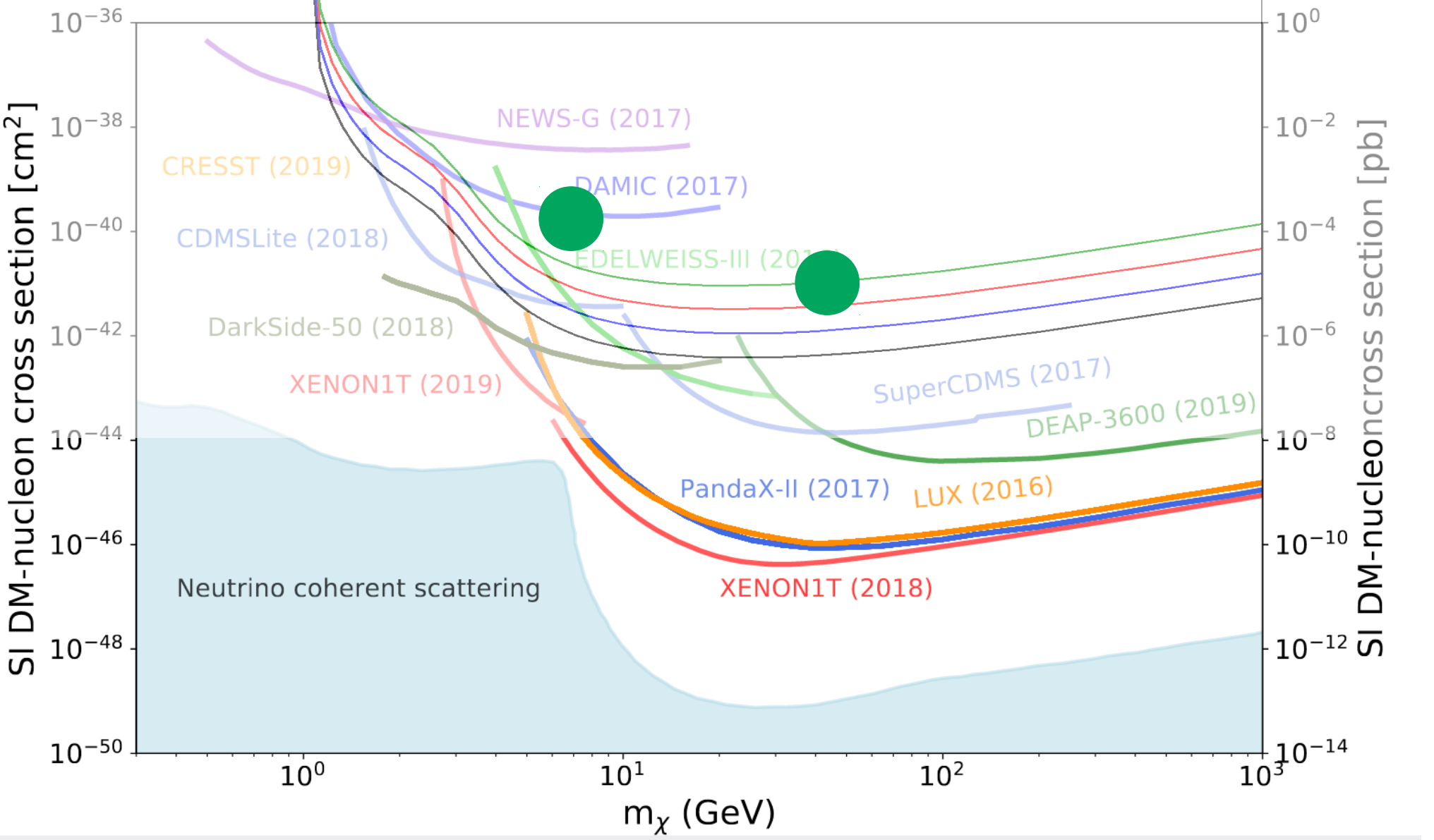
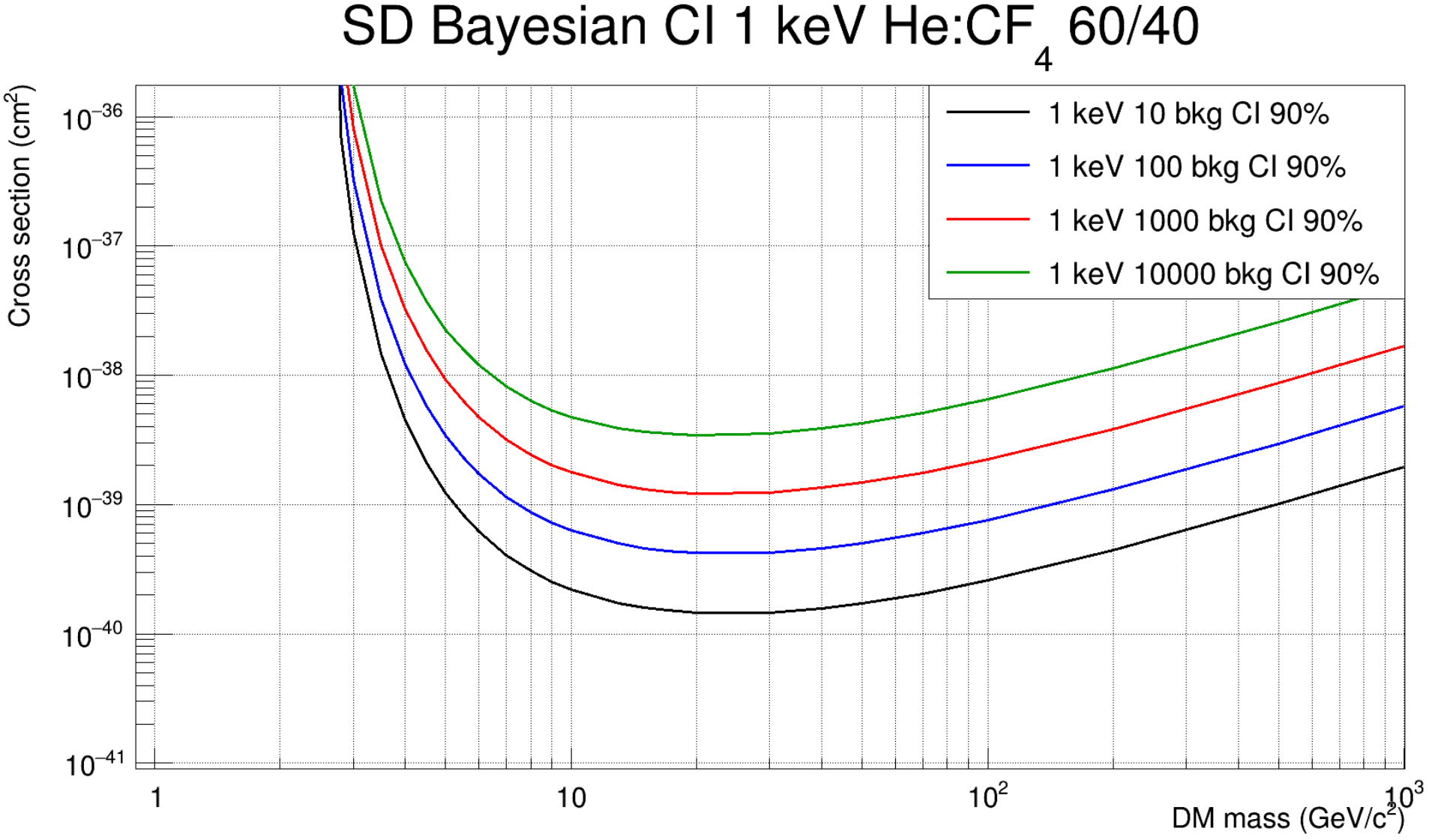
Small Update for DM Limits

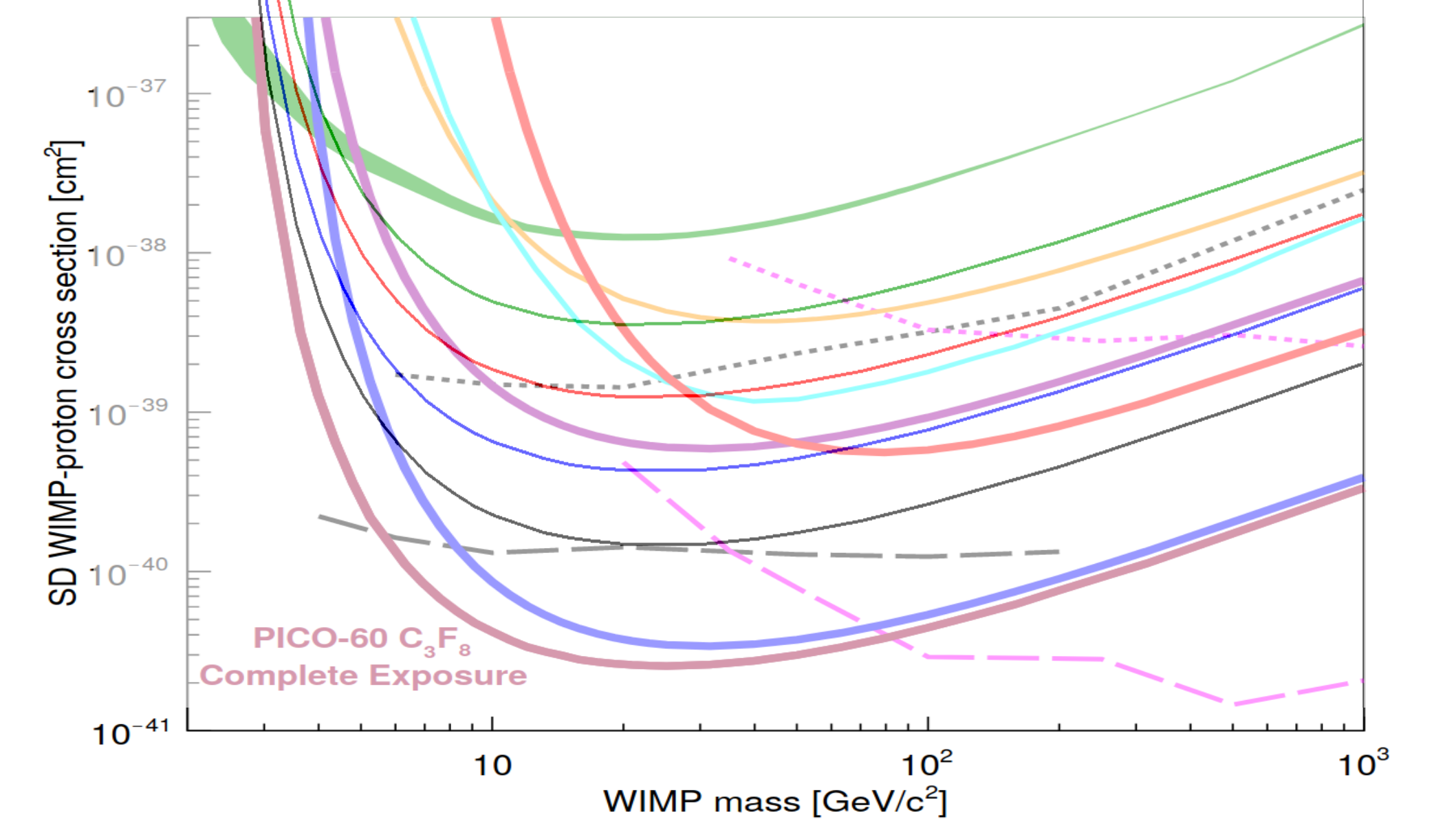
- Updated version of the limits both for SD and SI
- QF are taken into account as the latest version provided by Flaminia
- Bayesian 90% C.I. calculated


SI Bayesian CI 1 keV He:CF4 60/40
Cross section (cm2)
10−35
10−36
10−37
10−38
10−39
10−40
10−41
10−42
10−43
10−44
10−1
1
10
10²
10³
DM mass (GeV/c²)
1 keV 10 bkg CI 90%
1 keV 100 bkg CI 90%
1 keV 1000 bkg CI 90%
1 keV 10000 bkg CI 90%


SI DM-nucleon cross section [cm^2]
SI DM-nucleoncross section [pb]
m_χ (GeV)
10^{-36}
10^{-38}
10^{-40}
10^{-42}
10^{-44}
10^{-46}
10^{-48}
10^{-50}
10^{0}
10^{-2}
10^{-4}
10^{-6}
10^{-8}
10^{-10}
10^{-12}
10^{-14}
10^{0}
10^{1}
10^{2}
10^{3}
NEWS-G (2017)
CRESST (2019)
DAMIC (2017)
CDMSLite (2018)
EDELWEISS-III (2016)
DarkSide-50 (2018)
XENON1T (2019)
SuperCDMS (2017)
DEAP-3600 (2019)
PandaX-II (2017)
LUX (2016)
Neutrino coherent scattering
XENON1T (2018)


SI DM-nucleon cross section [cm^2]
SI DM-nucleoncross section [pb]
m_χ (GeV)
10^{-36}
10^{-38}
10^{-40}
10^{-42}
10^{-44}
10^{-46}
10^{-48}
10^{-50}
10^{0}
10^{-2}
10^{-4}
10^{-6}
10^{-8}
10^{-10}
10^{-12}
10^{-14}
10^{0}
10^{1}
10^{2}
10^{3}
NEWS-G (2017)
CRESST (2019)
DAMIC (2017)
CDMSLite (2018)
EDELWEISS-III (201
DarkSide-50 (2018)
XENON1T (2019)
SuperCDMS (2017)
DEAP-3600 (2019)
PandaX-II (2017)
LUX (2016)
XENON1T (2018)
Neutrino coherent scattering


SD Bayesian CI 1 keV He:CF4 60/40
Cross section (cm2)
10−36
10−37
10−38
10−39
10−40
10−41
1
10
10^2
10^3
DM mass (GeV/c2)
1 keV 10 bkg CI 90%
1 keV 100 bkg CI 90%
1 keV 1000 bkg CI 90%
1 keV 10000 bkg CI 90%


SD WIMP-proton cross section [cm^2]
10^{-37}
10^{-38}
10^{-39}
10^{-40}
10^{-41}
PICO-60 C_3F_8
Complete Exposure
10
10^2
10^3
WIMP mass [GeV/c^2]