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**Noble Gases in Five NWA Angrites – First Detection of a Solar Signature in a Bulk Sample.**

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Noble gases are helpful to characterize meteorites, decipher pairing, learn more about their transfer to Earth and processes on their parent bodies. Here present new data for five angrites NWA 2999, 4590, 4801, 12004 and 12320. For the latter two these are to our knowledge the first noble gas measurements. We measured all He-Xe isotopes released in one step at 1700° from samples of 80-119 mg with the usual methods [1]. Most strikingly, NWA 12004 shows an abundant solar Ne signature, whereas the other meteorites contain only cosmogenic Ne. Similarly,  $^{36}\text{Ar}/^{38}\text{Ar}$  is  $\sim 5.25$  in NWA 12004 but essentially cosmogenic ( $\sim 0.7$ ) in the others. Helium in contrast is not solar in NWA 12004. So far in angrites only the glass of D'Orbigny contained solar gases [2]. The cosmic ray exposure ages for NWA 2999, 4590, 4801 are broadly consistent with those given for them in the literature [3]. An angrite age cluster can still not be identified. The complete data and particularly the origin of the solar gas signature in NWA 12004 will be discussed at the meeting.

[1] Riebe M. E. I. et al. (2017). *M&PS* 52, 2353-2374. [2]

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