

R010-24

C会場 : 11/5 AM2 (10:45-12:30)

11:30~11:50

過去1万年間に生じた大規模な太陽高エネルギー粒子イベント

#三宅 美沙¹⁾

¹⁾名大 ISEE

Extreme solar energetic particle events occurred in the past 10,000 years

#Fusa Miyake¹⁾

¹⁾ISEE, Nagoya Univ.

Cosmogenic nuclides such as ^{14}C , ^{10}Be , and ^{36}Cl are produced by galactic cosmic rays and solar energetic particles (SEPs) in the atmosphere. Extreme SEP events can cause an increase in cosmogenic nuclides-production that greatly exceeds background fluctuations. We have searched for signatures of past extreme SEP events by measuring ^{14}C concentrations in tree rings and ^{10}Be and ^{36}Cl concentrations in ice cores. So far, several candidates of extreme SEP events have been reported.

In this presentation, the latest review of the extreme SEP events discovered using cosmogenic nuclides and a search for extreme SEP events over the past 10,000 years will be reported.