Contribution ID: **77** Contribution code: **PSB-23** Type: **Poster**

# Calculation of the rate of production of cosmogenic nuclides

*Wednesday, 23 October 2024 17:35 (20 minutes)*

Calculate the production rate of cosmic nuclides in a certain place in the matter, use the flux of primary particles and secondary particles of particles reaching the earth's atmosphere, use software to simulate the process of particles bombarding objects, obtain the energy spectrum of particles and secondary particles at different depths, and calculate the production rate of different cosmogenic nuclides through the nuclear reaction cross-section data of the cross-section database, which is convenient for geologists to apply them to the calculation of the concentration of cosmic nuclides in the common terrain, and the model provides users with an effective method to study the production of cosmic nuclides on the earth's surface。

## Student Submission

Yes

**Primary authors:** CHEN, Dingxiong (College of Physics and Technology, Guangxi Normal University, Guilin, Guangxi 541004, China); SHEN, Hongtao (College of Physics and Technology, Guangxi Normal University, Guilin, Guangxi 541004, China); QI, Linjie (College of Physics and Technology, Guangxi Normal University, Guilin, Guangxi 541004, China); OUYANG, He (College of Physics and Technology, Guangxi Normal University, Guilin, Guangxi 541004, China); WU, Kaiyong (College of Physics and Technology, Guangxi Normal University, Guilin, Guangxi 541004, China); HAN, Xinyi (College of Physics and Technology, Guangxi Normal University, Guilin, Guangxi 541004, China); DU, Lingrong (College of Physics and Technology, Guangxi Normal University, Guilin, Guangxi 541004, China); LIU, WenqIao (College of Physics and Technology, Guangxi Normal University, Guilin, Guangxi 541004, China); HUANG, Xinya (College of Physics and Technology, Guangxi Normal University, Guilin, Guangxi 541004, China); CHEN, Weixin (College of Physics and Technology, Guangxi Normal University, Guilin, Guangxi 541004, China)

**Presenter:** CHEN, Dingxiong (College of Physics and Technology, Guangxi Normal University, Guilin, Guangxi 541004, China)

**Session Classification:** Poster Session B

**Track Classification:** Applications of Cosmogenic Isotopes