

749th ASRC Seminar

Date: Mar. 6 (Wed), 10:30~12:00

Location: Room 103, ASRC Bldg.

Speaker: Prof. Benoit Gall

(Strasbourg University – IPHC, France)

Title: High-intensity heavy-ions beams
with MIVOC method

Abstract:

The emblematic ^{48}Ca , associated with rare actinides target material, enabled discovery of the heaviest elements known today. Nevertheless with Cf targets we reach the limits in terms of available isotope material. We now need intense beams of ^{50}Ti , ^{51}V , ^{54}Cr in order to enable discovery of new elements. Due to the high melting point of these materials, it is rather difficult to produce intense beam with reasonable material consumption. In the 90' Nurmia proposed to produce Metallic Ions out of Volatile Organic compounds. This "MIVOC" method enabled a wide variety of beams.

The first part will be devoted to the developments performed at Strasbourg Univ. leading to high intensity heavy-ion beam accelerated by means of isotopically enriched titanium MIVOC compound. The second part will concentrate on the synthesis and acceleration of ^{51}V and ^{54}Cr isotopic MIVOC compounds and ongoing development on uranocene.

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