

Abstract Submitted  
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**Concentration dependence of magnetic characteristics in  $\text{EuFe}_2(\text{As}_{1-x}\text{P}_x)_2$  single crystals**<sup>1</sup> TAKANARI KASHIWAGI, TAKUYA ISHIKAWA, TOMOKI GOTA, YOUHEI JONO, AKIHIKO NOZAWA, KASUMI TASHIMA, KAZUO KADOWAKI, Univ. of Tsukuba — In order to understand the structural and magnetic characteristics of  $\text{EuFe}_2(\text{As}_{1-x}\text{P}_x)_2$ , we have performed electron spin resonance (ESR) and magnetization measurements. The experimental results of the doping dependence of both measurements for the single crystal of  $\text{EuFe}_2(\text{As}_{1-x}\text{P}_x)_2$  samples suggest the change of the exchange interaction and/or the anisotropy of Eu-site. The angular dependence of the ESR signal in the *ab*-plane clearly shows the change of the in-plane anisotropy by the doping of P. The details will be discussed in the meeting.

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Takanari Kashiwagi  
Univ. of Tsukuba

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