## Remarks on Physics Programs at SAMURAI

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# SAMURAI categorized by detectors/facilities (with yesterday's speaker)

- Magnet/Magnetic field H. SATO/H. Otsu
- Fragment detector T. Kobayashi
- Vacuum system Y. Shimizu/H. Otsu
- Neutron Detectors(NEBULA) T. Nakamura
- Proton Detectors K. Yoneda
- TPC
   T. Murakami
- Polarized deuteron K. Sekiguchi
- DAQ H. Baba

#### How about physics programs?

Early 2012 Commissioning
Day-1 Experiments
(Mainly from core construction team )

2013~

Experiments from SAMURAI Collaboration and Others

Each member of the SAMURAI construction team should take the initiative!

What is "Your Day-1 Experiment" at SAMURAI?

#### Today's program

 First Phase Experiment --- Day-1 or rather early stage (2012-13)
 T.Nakamura, Y. Kondo, T. Kobayashi

 Second Phase Experiment --- (Mainly from members of SAMURAI construction team)
 Y.Togano/K.Yoneda, T.Murakami, K.Sekiguchi
 Y.Matsuda, N.Iwasa, T.Kawabata, K.Yoshida, W.Henning

#### Collaboration based on physics

### We should now consider forming collaborations based on <a href="mailto:physics">physics</a>!

- Coulomb Breakup and Soft E1 excitation
- Unbound nuclei and resonances
- Pygmy dipole resonance
- Knockout Reactions (p,pp)(p,pn)
- Heavy ion collision (EOS)
- (p,gamma) and associated nucleo-synthesis
- Polarized deuteron and three-body force
- E0 Mode (alpha,alpha')
- Cluster Nuclear Physics
- Molecular States

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