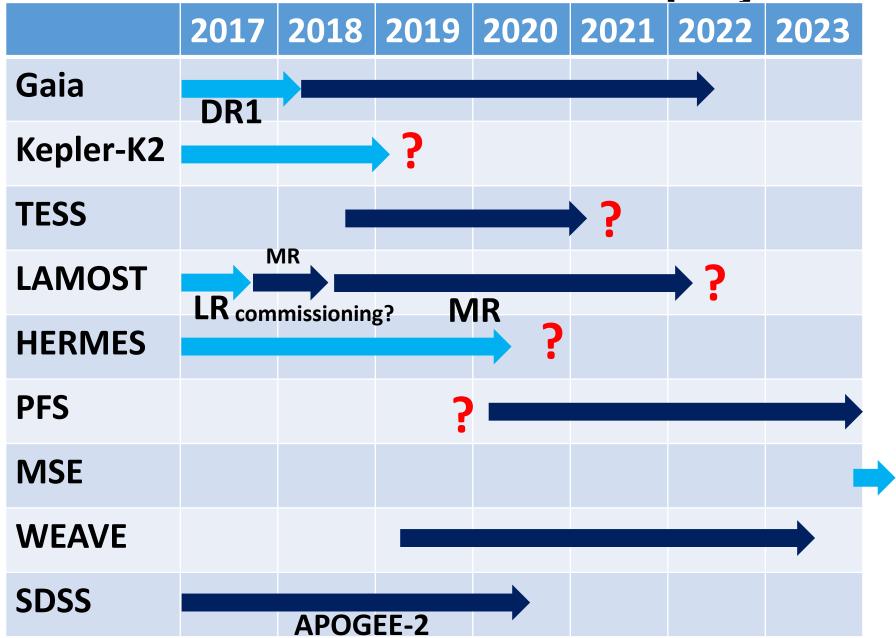
#### **GA/Stars**

- W. Aoki, H-N. Lee, H. Yan, A. McConnachie,
- P. Cote, M. Ishigaki, T. Matsuno,
- J. Bland-Hawthorn, S. Sharma



Timeline of instruments and projects



#### Which elements for chemical tagging?

...Having impact on choices of wavelength range and spectral resolution of new instruments.

- O, Mg: SN II (M≥20Msun)
- Si, Ca, Ti, Cr (even-Z): SN II(not only massive ones)
- Mn, Co: SN II, metallicity dependent
- explosion energy dependent
- Eu: r-process. low-mass SN II?
- Y, Zr, Ba, La: s-process (+r-process at low metallicity)
- Fe, Ni: "metallicity". SN Ia contribution determination of atmospheric parameters
- Sc, Y

## Define some model cases of collaborations (both science and instrumentation)

- Ongoing collaborations:
  LAMOST/Subaru-HDS for very metal-poor stars
- Future follow-up
  Spectroscopic (HR) follow-up of objects from other surveys (e.g. PRISTINE, U-band imaging)
- Instrumentation
  Prototype of HR spectrometer for MSE on Subaru
  (also prototype of Subaru/PFS-HR)

### Feedback to Subaru instrumentation and operation from scientific perspectives?

Faster response for follow-up?

# Launch science/instrumentation working group in each category for further discussion/contact/mini-workshop?

- Discussion items:
  - -key elements for chemical tagging etc.
  - -connecting spectrograph, spectral data ...
  - -proposal for Subaru and other telescopes?
  - -changing students

Meetings, email connection ...
 joining in meetings on PFS?