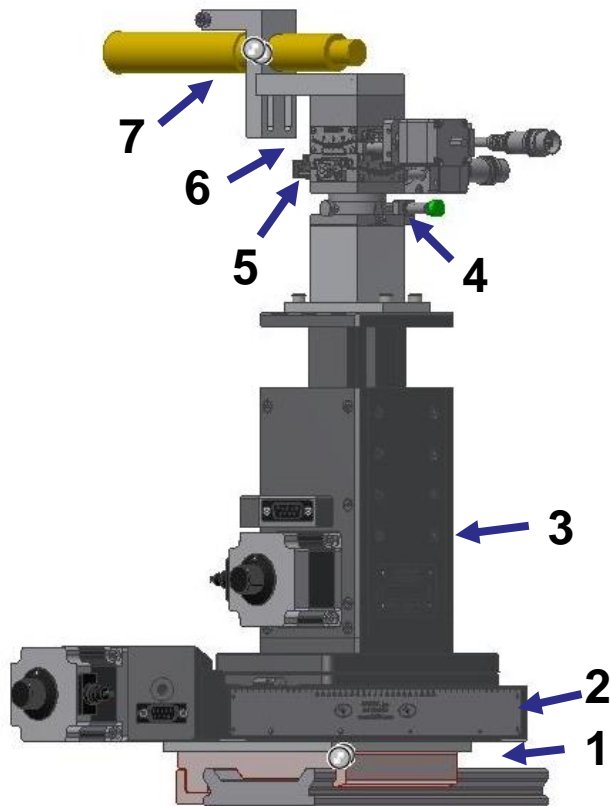


# Grazing Angle XAFS Setup Upgraded @ HXMA



**Figure 1**

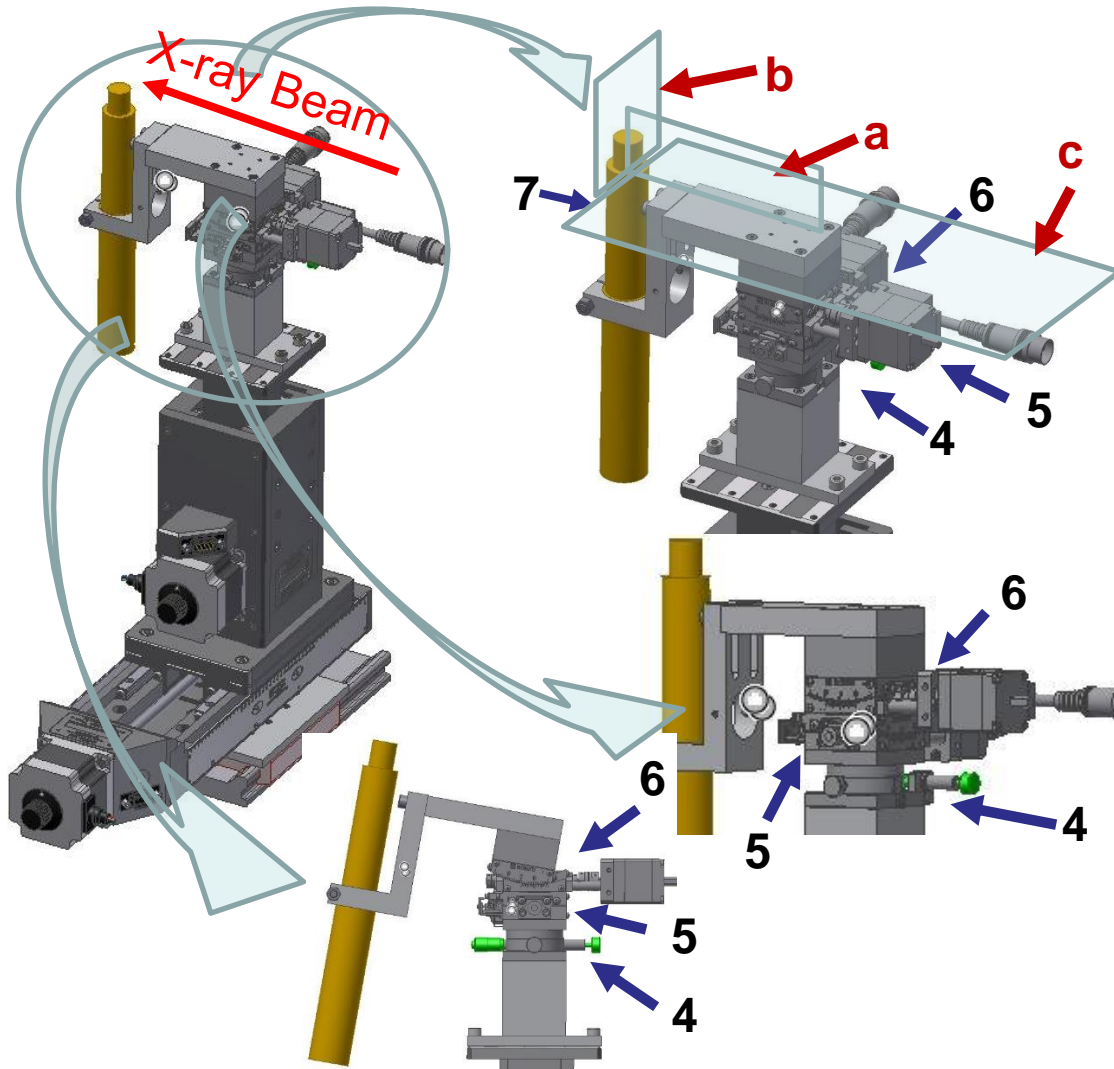
## Features

- ❑ Five degrees of freedom with four degrees motorized;
- ❑ Two grazing angle setup geometries, i.e., “in-plane” and “out of plane” grazing incidence, respectively.

## General Setup

1. The assemble is carried by a X95 rail, bolted to the XAFS table (Fig.1);
2. ADC horizontal stage, motorized with 100 mm travel;
3. ADC vertical stage, motorized with 75 mm travel;
4. Kohzu rotation stage, manual with 360° rotation;
5. Kohzu swivel stage, motorized with  $\pm 10^\circ$  angle swivel;
6. Kohzu swivel stage, motorized with  $\pm 10^\circ$  angel swivel;
7. Spindle with adjustable spin rate.

# Different views of “in-plane” setup geometry



## Features (Fig.2):

- The sample nominal is rotatable in the plane “a” and “b” (motorized  $\pm 10^\circ$ ). The two planes are both vertical to the X-ray beam polarization plane “c”;
- The sample alignment is also obtained by the motorized horizontal and vertical ADC stages and the Kohzu manual rotation stage.

- 4. Kohzu rotation stage,
- 5. Kohzu swivel stage,
- 6. Kohzu swivel stage,
- 7. Spindle

Figure 2

# Different views of “out of plane” setup geometry

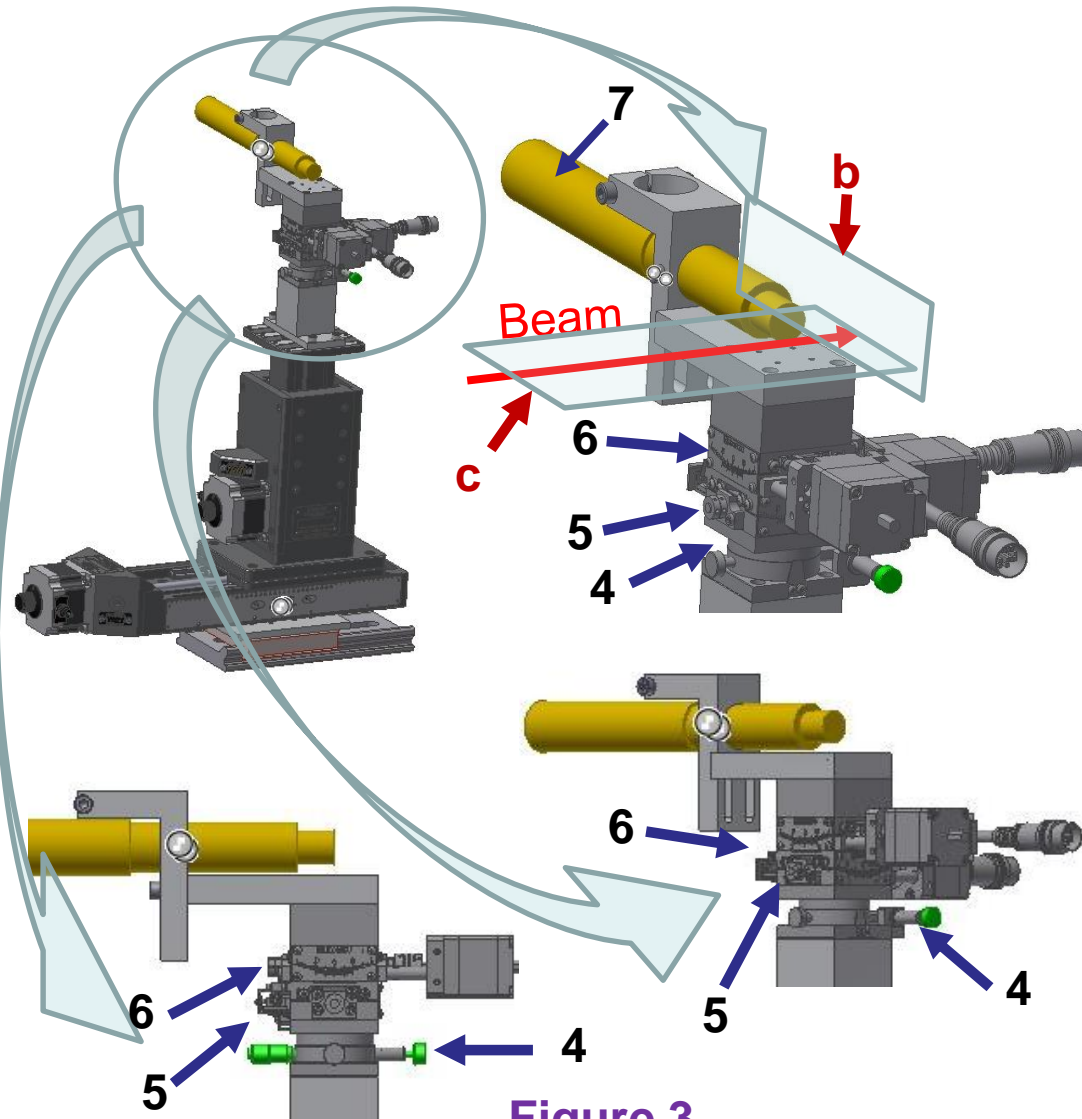


Figure 3

## Features (Fig.3)

- ❑ The sample nominal is within the X-ray beam polarization plane “c” and rotatable (manual) in the plane “c”;
- ❑ The sample nominal is rotatable (motorized,  $\pm 10^\circ$ ) in the plane “b”, the latter is vertical to the plane “c”;

4. Kohzu rotation stage,  
 5. Kohzu swivel stage,  
 6. Kohzu swivel stage,  
 7. Spindle