Data processing steps for 3-D M

acquisition A1
T1: +hol_obj($\alpha_{i...n}$) / +hol_ref($\alpha_{i...n}$)
T2: -hol_obj($\alpha_{i...n}$) / -hol_ref($\alpha_{i...n}$)

acquisition A2
T1: +hol_obj($\alpha_{i...n}$) / +hol_ref($\alpha_{i...n}$)
T2: -hol_obj($\alpha_{i...n}$) / -hol_ref($\alpha_{i...n}$)

Averaging, reconstruction

T1=$[\phi_{\alpha,i} \ldots \phi_{\alpha,n}]$

T2=$[\phi_{\alpha,i} \ldots \phi_{\alpha,n}]$

Alignment

Magn.=$[\phi_{m,\alpha,i} \ldots \phi_{m,\alpha,n}]$

El.=$[\phi_{e,\alpha,i} \ldots \phi_{e,\alpha,n}]$

Ampl.=$[\phi_{e,\alpha,i} \ldots \phi_{e,\alpha,n}]$

Image alignment

Alignment of tilt series
to tilt axis

Aligned tilt series $\phi_{e,\alpha}$

Reconstruction by
SIRT, tomography

Aligned tilt series $\phi_{m,\alpha}$

Confidence
matrices

3D Mask

Dataset #1

ϕ^{o}_{01}

Alignment

ϕ^{o}_{02}

Dataset #2

Shift

Shift, rotation

Dataset #1+2

Buffer

MBIR

3-D M