close all

cd('/home/mig128gb1/Desktop/Phd Work/PAT/Acceleration/MY CODES/my\_new\_codes/my\_new\_new\_codes');

load detectors\_40\_2(100).mat

cd('/home/mig128gb1/Desktop/Phd Work/PAT/26-oct-2017/Results');

%% blood vessel phantom

b=sdn2\_v\_bv;

BV2=BV2\_bv;

x\_bv\_40=x\_bv;

% r=1;

% eps = 1e-1;

% alpha=0.7;

% betaa=0.3;

r=1;

eps = 1e-3;

alpha = 1.05;

betaa = 1.05;

[x\_bp\_lsqr\_bv\_40, PC\_bp\_lsqr\_bv\_40, CNR\_bp\_lsqr\_bv\_40]=demo\_lanc\_tik\_back(A\_b,b,BV2,x\_bv\_40,r,eps,alpha,betaa);

%% derenzo phantom

b=sdn2\_v\_der;

BV2=BV2\_der;

x\_der\_40=x\_der;

% r=3;

% eps = 1e-2;

% alpha=0.3;

% betaa=0.7;

r=1;

eps = 1e-3;

alpha = 1.05;

betaa = 1.05;

[x\_bp\_lsqr\_der\_40, PC\_bp\_lsqr\_der\_40, CNR\_bp\_lsqr\_der\_40]=demo\_lanc\_tik\_back(A\_b,b,BV2,x\_der\_40,r,eps,alpha,betaa);

%% pat phantom

b=sdn2\_v\_pat;

BV2=BV2\_pat;

x\_pat\_40=x\_pat;

% r=2;

% eps = 1e-2;

% alpha=0.9;

% betaa=0.1;

r=1;

eps = 1e-3;

alpha = 1.05;

betaa = 1.05;

[x\_bp\_lsqr\_pat\_40, PC\_bp\_lsqr\_pat\_40, CNR\_bp\_lsqr\_pat\_40]=demo\_lanc\_tik\_back(A\_b,b,BV2,x\_pat\_40,r,eps,alpha,betaa);