
Subject: KalmanFit Error

Posted by [Tobias Stockmanns](#) on Fri, 09 Nov 2007 08:59:47 GMT

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Dear KalmaFitters,

when I try to fit MVD data with the Kalman task, I get the error, that (most of) my matrices are zero, which I do not understand.

Maybe one of you can help me

Thanks

Tobias

MvdKalmanTask::Exec

starting track0

-l- MvdRecoHit::MvdRecoHit(MvdHit*) called.

o: 0.287864 2.69613 5.975

u: 0.707107 -0.707107 0

v: 0.707107 0.707107 0

-l- MvdRecoHit::MvdRecoHit(MvdHit*) called.

o: 2.11 1.67845 8.735

u: 0 1 0

v: 1 0 0

-l- MvdRecoHit::MvdRecoHit(MvdHit*) called.

o: 2.20361 1.60633 14.3662

u: 0.00398854 -0.999595 0.0281843

v: 0.999992 0.00399013 0

-l- MvdRecoHit::MvdRecoHit(MvdHit*) called.

o: 4.63742 3.15743 18.475

u: -0.729407 0.68408 0

v: 0.68408 0.729407 0

4 hits in track 0

starting fit

Error in <TDecompLU::DecomposeLUCrout>: matrix is singular

Error in <TDecompLU::InvertLU>: matrix is singular, 0 diag elements < tolerance of 2.2204e-16

FitterException thrown with whatString:

cannot invert covsum in Kalman Gain - det=0

in line: 265 in file: /home/stockman/fairroot/cbmssoft_old/pandaroot/genfit/Kalman.cxx

FitterException Info Output

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Matrices Label String:

cov, HitCov, covsum1 and covsum

Matrices:

5x5 matrix is as follows

| 0 | 1 | 2 | 3 | 4 |

0	0	0	0	0	0
1	0	0	0	0	0
2	0	0	0	0	0
3	0	0	0	0	0
4	0	0	0	0	0

3x3 matrix is as follows

	0		1		2	

0	0.002887		0		0	
1	0	0.002887			0	
2	0	0		0		

5x3 matrix is as follows

	0		1		2	

0	0		0		0	
1	0		0		0	
2	0		0		0	
3	0		0		0	
4	0		0		0	

3x3 matrix is as follows

	0		1		2	

0	0.002887		0		0	
1	0	0.002887			0	
2	0	0		0		

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