

SHORT COURSE: LECTURES ON THE BAYESIAN AND MINIMAX QUICKEST DETECTION PROBLEMS

BY

ALBERT N. SHIRYAEV

STEKLOV MATHEMATICAL INSTITUTE AND MOSCOW STATE UNIVERSITY

4 – 5 July 2012, ISEG, Technical University of Lisbon

Abstract: Four basic formulations (variants A, B, C, and D) of the quickest detection of the spontaneously appearing hidden effects (change points). Reduction of these problems to the Markovian optimal stopping problems for the sufficient statistics. Structure and dynamics of the sufficient statistics. Description of the optimal procedures of detection. The cases of discrete and continuous time (Brownian motion case) will be investigated.

Timetable:

1st lecture: 4 July, Wednesday, 10:00 – 12:00;

2nd lecture: 4 July, Wednesday, 14:00 – 16:00;

3rd lecture: 5 July, Thursday, 10:00 – 12:00.

Location: ISEG (Anfiteatro I, 4º piso, Ed. Quelhas), Lisboa.

Registration: For registration please send an email message to Prof. Maria do Rosário Grosinho at mrg@iseg.utl.pt. There is no registration fee.