Avand in vedere materialul acoperit in luna octombrie, cursul

De la spectrul operatorilor Laplace-Beltrami la topologie şi invers via matematica oscilatorului armonic

va continua in luna noiembrie (+decembrie 1) si va fi constituit din 5 lectii ce vor prezenta urmatoarele aspecte.

• **Lecture 1.** Morse theory - the Geometric complex of a pair (Riemannian metric + Morse function) - *Integration* from DeRham complex to geometric complex.

• **Lecture 2.** Witten deformation, Witten Laplacians, multivariable harmonic oscillators and their spectral package.

• **Lecture 3.** Analytic branches of eigenvalues and eigenforms for Witten Laplacians.

• **Lecture 4.** Clustering of the spectral package of a Riemannian manifold.

• **Lecture 5.** The virtually small spectral package.

Aceasi sala / aceeasi zi/ acesasi ora ,(IMAR 309-310, Joi , 2 PM).

Reference:

D. Burghelea, Witten deformation and the spectral package of a Riemannian manifold, Math Reports 23, (73), 1-2 , 9-30

S.Haller, Analytic eigenbranches in semiclassical limit, Compl Anal. Oper. Theory. 14 (2020), 52

Un "Summary" pentru fiecare din lectii si texte suplimentare (cand va fi cazul) vor fi adaugate in fisierul acestui curs.