COMPLEX DYNAMICS GRADUATE COURSE, FALL 2021

ALAN SOLA

TENTATIVE SCHEDULE

Lecture	Topics	Section
September 10	Intro. Montel's theorem. QC maps. Attracting fixed points.	I, II.1-4
September 14	Neutral fixed points. Definition of the Julia set.	II.5-6. III.1
October 5	Neutral f.p. cont'd.	II.5-6
October 12	Critical points and repelling periodic points	III. 2-3
October 19	Polynomial dynamics	III.4
October 26	Wandering domains (I.N. Baker)	Articles
November 2	No wandering domains (D. Sullivan)	IV. 1-2
November 9	The classification theorem	IV.2
November 16	Critical points; Siegel disks and Herman rings	V.1
November 23	The Mandelbrot set, pt 1	VIII.1-2
December 7	The Mandelbrot set, pt 2	VIII.1-2
December	Oral examinations	

DEPARTMENT OF MATHEMATICS, STOCKHOLM UNIVERSITY, 106 91 STOCKHOLM, SWEDEN.

Email address: sola@math.su.se