

A) Preparatory algebraic theory

- a) Construct notes on types, sets, mappings, domains of fixed and variable types,...
- b) Construct notes on sequences (adjunction, multiplication, sections, ...)
- c) Construct notes on mappings, sections of mappings ($A^{\mathbb{C}}$, ...)...
- d) Construct ^(yes.) notes on solution of linear equations over commutative rings, denominators, ...
- e) Construct notes on mapping systems
- f) Construct final notes on general stratified commutative rings, use of multiplicative modules, ...
- g) Construct resumé of paper on vector valued continued fractions
- h) Construct resumé of notes on sequel to abstract theory of ε -algorithm
- i) Construct notes on LU decomposition, Jacobi's theorem on the adjugate, products of determinants, ... over stratified commutative ring
- j) Construct resumé of notes on factorisation of diagonal ~~near~~ triangular matrix and extend them to factorisations

of LU decomposition of matrices

k) Construct notes on extension of determinantal identities to rings,...

l) Construct notes on treatment of vector inverse by differentiation

B) Polynomials and rational functions

a) Construct notes on constraint systems, polynomials, rational functions,...

c) Interpolation theory

a) Complete resumé of notes on power polynomial and rational function interpolation with discrete argument values, recursions involving numerators and denominators, forms of ε -algorithm,...

b) Extend to confluent arguments

c) Extend to transformations of Schwein's series (orthogonal polynomial expansions, ...)

d) Construct resumé of paper on interpolation by the use of rational functions

e) Construct resumé of paper on functional interpolation

f) Construct notes on expression of special determinants in closed form

D) Moment problem and stability functions

- a) Construct resumé of notes on Hamburger-Pick-Norankinna problem
- b) Construct resumé of paper on stability functions (insert preliminary section on connections between various classes of functions, if necessary?)

E) Anti-derivative theory

- a) Construct notes on extension of b, α continued fraction integration processes

- b) Construct resumé of notes on Bürmann series over a field
- c) Notes on the expression of moments as continued fraction integrals

F) An array of functions

- a) Construct resumé of notes on array of functions and integral transform of continued fractions

G) Functions defined by an integral transform

- a) Construct resumé of Tampa conference paper
- b) Construct resumé of BQ Soc Most Mex paper
- c) Construct resumé of notes on analytic continuation of a function defined by an integral continued fraction
- d) Construct notes on zeta functions of positive integer order

H) The Euler-Maclaurin and Bore series

- a) Construct resumé of paper on continued fraction transformation of Euler-Maclaurin series
- b) Construct resumé of notes concerning principal and alternating sums of a function defined over a strip in the complex plane
- c) Construct notes on various forms of the remainder term in the Euler-Maclaurin series (connections with Faber polynomials?)

I) Sequence transformations

- a) Construct notes on successive derivation of totally monotone sequences, positive definite sequences, ... (including extraction of totally monotone sequence from c.f. convergents)
- b) Construct notes on derivation of sequences associated with determinate moment problem (give Bull Soc. Mat Mex paper result)
- c) Construct notes on auxiliary transformation before application of ε -algorithm
- d) Resumé of result on convergence and truncation error bounds for associated continued fraction

J) Low priority

a) Construct resumé of paper on rational approximations to the exponential function

b) Construct documentations for Algol programmes relating to optimisation, vector ε -algorithm, ...

c) Prepare talks on anti-derivative, results in theory of Padé table, numerical use of calculus of finite differences, ... (also on simulation of constructions in lower level language, referring to Numal in Fortran; recursion applied to nonassociative algebras)