TOPICS FOR A BACHELOR THESIS, SPRING 2018

PAUL ANDRIES ZEGELING, ROOM 513

THE SQUARE ROOT OF A MATRIX: $A^{1/2}$

FRACT<u>AL</u> DERIVATIVES

THE HILBERT TRANSFORM: $\mathcal{H}$

NON-STANDARD FINITE DIFFERENCES

THE MITTAG-LEFFLER FUNCTION: $E_{\alpha,\beta}(z)$

THE h-CURVE IN THE HOMOTOPY ANALYSIS METHOD

THE FUNCTIONAL EQUATION: $f(x+1) = x\ f(x)$