Coxeter groups application to-do list

# BasicCoxeterFunctions

* ~~Some groups renamed, amend enumerated elements data directory names accordingly~~
* Use in-built connected component detection to speed up special subgroup code, and also square complex code
* ~~Add Coxeter and presentation diagrams~~
* ~~Define function DavisComplexDimension~~
* Define functions for direct and free products of Coxeter systems
* Prevent pre-defined Coxeter systems from being renamed
* ~~Fix IrreducibleFactors[M]~~
* Remake RACGQ documentation
* ~~Define function ValidCoxeterMatrixQ and apply it to GroupName~~
* Find a good place to include group automorphism section

# Changing how group elements are dealt with

The following functions must be redefined when moving from “1234” to “s1s2s3s4”

* Generators
* CoxeterEdges
* DiagramNeighbours
* IrreducibleCGQ
* SpecialSubgroup
* ConvertToSpecialSubgroup
* ConvertFromSpecialSubgroup
* IrreducibleFactors
* Braid
* InverseBraid
* TitsM1
* TitsM2
* TitsRepresentation
* CoxeterLength
* M1ReducibleWordQ
* All stored data

# ElementEnumeration

* Combine WordProblem functions into a single function with two options
* words was faulty. Implement group length generating function and use it to check that the correct number of elements has been enumerated in each case
* ST data (up to length 66) should be recalculated, and HT, TT, S data should be reclassified
* E8 element data corrupted, needs to be recomputed
* ST smooth element data should be re – incorporated
* Add error messages for SmoothEnumeratedQ etc if the arguments are improperly formatted
* Combine file export functions into single function
* Improve efficiency of CoxeterGroupElements
* Define a function NewCoxeterSystem which defines the matrix, GroupName, plus optionally other group data which is not automatically computable
* Define a function GroupData which outputs details of a Coxeter system
* Update GroupName documentation when error messages added
* Stop CoxeterGroupElements from running if k=Infinity

# CoxeterCombinatorics