

TC10 / CC Examples

Alternant

alternant1.cc

example of a control matrix of an alternant code

alternant2.cc

example of alternant matrix

BCH

bch_16(4).cc

control matrix of $BCH_{16}(4)$

bch-dimension-distancelb.cc

bch_dimension_distancelb(m,q):

supplies a relation $\{s \rightarrow \{k_s, d_s\}$ with s in $2 \cdots n$, where $k_s = \dim BCH_q^m(s)$ and d_s is the best lower bound of its distance.

Conference matrices

conference.cc

Control matrices over subfield

blow-prune-1.cc, blow-prune-2.cc, blow.cc, components.cc

Cyclic codes

cyclic-normalized-matrix[12,6]_3.cc

normalized generating matrix of the ternary Golay code

cyclotomic-classes.cc

meggitt-table-G3.cc, meggitt-table-G2.cc

X11-1.cc

Finite fields and rings

field.cc, GF.cc, Zmod.cc

legendre.cc

order.cc

ring.cc

Functions

next_q.cc

next_q(n)

primepower.cc

parity-completion.cc

vandermonde.cc

Goppa codes

goppa-decoder.cc

Hadamard matrices and codes

hadamard-1.cc, hadamard-2.cc

hadamard-code.cc

hadamard-code-Z3&Z7.cc

hadamard-code-Z5.cc

hadamard-decoder.cc

paley.cc

Hamming codes

[7,4,3].cc

Perfect codes

perfect.cc

Problems

Problem47.cc

Problem63.cc

Problem68.cc, Problem68bis.cc

Problem69.cc, Problem69bis.cc

Repetition codes

[3,1,3].cc

RS codes

RS[6,3]_7.cc

interpol-decoded.cc, RS-ID.cc

two implementations of the interpolation decoder

Special codes

code(8,20,3).cc o code(8,20,3).t