random multigraph models

☑ multigraphs represented by their edge multiplicity sequence

$$\mathbf{M} = (M_{ij} : (i,j) \in R)$$

where R is the canonical site space for undirected edges

$$R = \{(i,j) : 1 \leq i \leq j \leq n\}$$

that is

$$(1,1) < (1,2) < \cdots < (1,n) < (2,2) < (2,3) \cdots < (2,n) < \cdots < (n,n)$$

and n is number of nodes

☑ so for our examples with multigraphs on 4 nodes the number of edge sites is 10:

$$(1,1), (1,2), (1,3), (1,4), (2,2), (2,3), (2,4), (3,3), (3,4), (4,4)$$

random multigraph models