

Expected state of pairs of sites and identity by descent

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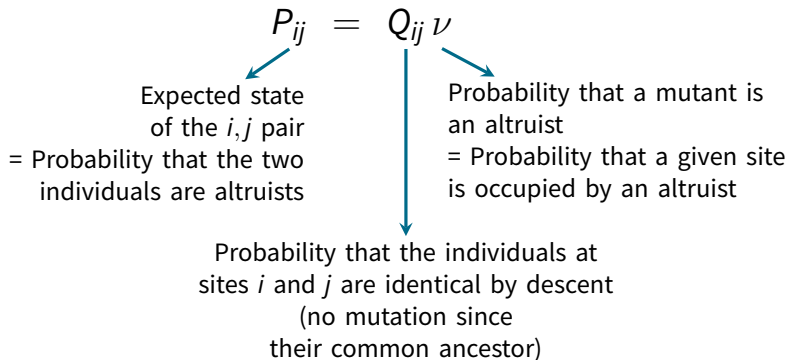
$$P_{ij} = Q_{ij} \nu$$

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Probability that the individuals at
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(no mutation since
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$$P_{ij} = Q_{ij} \nu + (1 - Q_{ij}) \nu^2$$

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Probability that a mutant is
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= Probability that a given site
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Q_{in}, Q_{out}