

JQuantile

The class JQuantile resides in the JTOOLS namespace and extends the class JStats. It be used to determine quantiles.

The following code extract:

```
const double x      = 0.0;
const double sigma = 1.0;

JQuantile Q;

for (int i = 0; i != numberOfEvents; ++i) {
    Q.put(gRandom->Uniform(0.0, 1.0));
}

for (const double x : { 0.1, 0.5, 0.9}) {

    NOTICE("forward  quantile " << FIXED(6,3) << x << ' ' << FIXED(6,3) << Q.getQuantile(x, JQuantile::forward_t)
    NOTICE("symmetric quantile " << FIXED(6,3) << x << ' ' << FIXED(6,3) << Q.getQuantile(x, JQuantile::symmetric_t)
    NOTICE("backward  quantile " << FIXED(6,3) << x << ' ' << FIXED(6,3) << Q.getQuantile(x, JQuantile::backward_t)
}
```

could produce:

```
forward  quantile  0.100  0.104
symmetric quantile  0.100  0.098
backward  quantile  0.100  0.900
forward  quantile  0.500  0.499
symmetric quantile  0.500  0.493
backward  quantile  0.500  0.499
forward  quantile  0.900  0.900
symmetric quantile  0.900  0.902
backward  quantile  0.900  0.104
```