

```

variables = Association[
  "indVars" -> {n},
  "depVars" -> {v, m},
  "rhs" -> {
    v[n] - (v[n + 1]^2/2 - m[n + 1]^2/2) + (v[n]^2/2 -
    m[n]^2/2),
    m[n] + (m[n + 1]*v[n + 1]) - (m[n]*v[n]) }
];
DiscreteConservedQOperator[variables][{v[n], m[n]}]

```