

C++ code 11.6.9: Implementation of `computeInitVec()` → [GitLab](#)

```
2 template <typename FUNCTOR>
3 Eigen::VectorXd computeInitVec(const UniformCubicSpline &f, FUNCTOR &&u0,
4                                double h, double T) {
5     Eigen::VectorXd mu0;
6     const double A = -1.0; // left bound of support
7     const double B = 1.0; // right bound of support
8     // Here one could also call findSupport()
9     const double AT = std::min(A, A + f.derivative(-1.0) * T);
10    const double BT = std::max(B, B + f.derivative(1.0) * T);
11
12    const int m_minus = (int)std::floor(AT / h);
13    const int m_plus = (int)std::ceil(BT / h);
14    const int N = m_plus - m_minus + 1;
15
16    const Eigen::VectorXd x =
17        Eigen::VectorXd::LinSpaced(N, m_minus * h, m_plus * h);
18    mu0 = x.unaryExpr(std::forward<FUNCTOR>(u0));
19    return mu0;
20 }
```