ECSpace

```
+ BasisFunctionType: {ORDINARY_BASIS, B_BASIS}

# _alpha: double
# _beta: double
# _polynomial: CharacteristicPolynomial
# _phi: std::vector<_OrdinaryBasisFunction>
# _rho: SP<RealMatrix>::Default
# _reversed_Wronskian_beta: SP<RealMatrix>::Default
# _L: SP<RealMatrix>::Default
# _U: SP<RealMatrix>::Default
# _lambda: SP< ColumnMatrix<double> >::Default
# _mu: SP<RealMatrix>::Default
# _is_reflection_invariant: bool

- _deleteAllDynamicallyAllocatedObjects(): void
+ ECSpace(alpha: double = 0.0, beta: double = 1.0,
          check_for_ill_conditioned_matrices: bool = false,
          expected_correct_significant_digits: int = 5)
+ insertZero(a: double, b: double, m: int,
          update_both_bases: bool = true,
          check_for_ill_conditioned_matrices: bool = false,
          expected_correct_significant_digits: int = 5): bool
+ insertZero(zero: const CharacteristicPolynomial::Zero&,
          update_both_bases: bool = true,  check_for_ill_conditioned_matrices: bool = false,
          expected_correct_significant_digits: int = 5): bool
+ deleteZero(a: double, b: double, update_both_bases: bool = true,
          check_for_ill_conditioned_matrices: bool = false,
          expected_correct_significant_digits: int = 5): bool
+ deleteZero(zero: const CharacteristicPolynomial::Zero&, update_both_bases: bool = true,
          check_for_ill_conditioned_matrices: bool = false,
          expected_correct_significant_digits: int = 5): bool
+ updateBothOrdinaryAndNNBBases(check_for_ill_conditioned_matrices: bool = false,
                      expected_correct_significant_digits: int = 5): bool
+ setDefinitionDomain(alpha: double, beta: double,
                  check_for_ill_conditioned_matrices: bool = false,
                  expected_correct_significant_digits: int = 5): bool
+ <<const>> factorizationOfTheCharacteristicPolynomialChanged(): bool
+ <<const>> dimension(): int
+ <<const>> alpha: double
+ <<const>> beta: double
+ <<const>> operator ()(type: BasisFunctionType, i: int, j: int, u: double)
+ <<const>> basisTransformationFromNNBToOrdinary(): RealMatrix*
+ <<const>> isReflectionInvariant(): bool
+ <<const>> LaTeXExpression(i: int, expression: std::string&): bool
+ <<const>> generateImagesOfAllBasisFunctions(type: BasisFunctionType, maximum_order_of_derivatives: int,
          div_point_count: int): RowMatrix<SP<GenericCurve3>::Default>*
+ <<const>> clone(): ECSpace*
  <<friend>> operator <<(lhs: std::ostream&, rhs: const ECSpace&): std::ostream&
```

_OrdinaryBasisFunction

```
+ Type: {AET_COSINE, AET_SINE,
          AE_COSINE,  AE_SINE,
          AT_COSINE,  AT_SINE,
          P_COSINE,   P_SINE}

# _type: Type
# _a: double
# _b: double
# _r: int

+ _OrdinaryBasisFunction(a: double = 0.0,
                          b: double = 0.0,
                          r: int = 0,
                          cosine: bool = true)
+ <<const>> operator()(i: int, j: int): double
+ <<const>> type(): Type
+ <<const>> a(): double
+ <<const>> b(): double
+ <<const>> r(): int
```