My Project

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Modules Index

1.1 Modules List

Here is a list of all modules with brief descriptions:

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Chapter 2

File Index

2.1 File List

Here is a list of all files with brief descriptions:

olis_f90stdlib.f90 9

Chapter 3

Module Documentation

3.1 olis_f90stdlib Module Reference

Functions/Subroutines

- subroutine alloc_complex_eigenvects (matrix, eigenvals, u, v)
- subroutine alloc_complex_svd (matrix, sigma, u, vt)
- subroutine randseed (seed)
- subroutine printvectors (vect, desc, f)
- complex(kind=dp) function, dimension(2, 2) outerproduct (a, b)
- complex(kind=dp) function complextrace (a)
- subroutine complex_eigenvects (a, w, vl, vr)
- subroutine complex_svd (a, sigma, u, vt)
- complex(kind=dp) function, dimension(2, 2) c_inv2 (m_in)
- real(kind=dp) function matrixnorm (c)

3.1.1 Detailed Description

Author

Oliver

oli's standard FORTRAN LIb

3.1.2 Function/Subroutine Documentation

3.1.2.1 alloc_complex_eigenvects()

```
subroutine olis_f90stdlib::alloc_complex_eigenvects (
             complex(kind=dp), dimension(:,:), intent(in) matrix,
             complex(kind=dp), dimension(:), intent(inout), allocatable eigenvals,
             complex(kind=dp), dimension(:,:), intent(inout), allocatable u,
             complex(kind=dp), dimension(:,:), intent(inout), allocatable v )
```

3.1.2.2 alloc_complex_svd()

```
subroutine olis_f90stdlib::alloc_complex_svd (
             complex(kind=dp), dimension(:,:), intent(in) matrix,
             real(kind=dp), dimension(:), intent(inout), allocatable sigma,
             complex(kind=dp), dimension(:,:), intent(inout), allocatable u,
             complex(kind=dp), dimension(:,:), intent(inout), allocatable vt )
```

3.1.2.3 c_inv2()

```
complex(kind=dp) function, dimension(2,2) olis_f90stdlib::c_inv2 (
             complex(kind=dp), dimension(2,2), intent(in) m_in )
```

3.1.2.4 complex_eigenvects()

```
subroutine olis_f90stdlib::complex_eigenvects (
             complex(kind=dp), dimension(:,:), allocatable a,
             complex(kind=dp), dimension(:), allocatable w,
             complex(kind=dp), dimension(:,:), allocatable vl,
             complex(kind=dp), dimension(:,:), allocatable vr )
```

3.1.2.5 complex_svd()

```
subroutine olis_f90stdlib::complex_svd (
             complex(kind=dp), dimension(:,:), intent(inout), allocatable a,
             real(kind=dp), dimension(:), allocatable sigma,
             complex(kind=dp), dimension(:,:), allocatable u,
             complex(kind=dp), dimension(:,:), allocatable vt )
```

3.1.2.6 complextrace()

```
complex(kind=dp) function olis_f90stdlib::complextrace (
             complex(kind=dp), dimension(:,:)  a )
```

3.1.2.7 matrixnorm()

```
real(kind=dp) function olis_f90stdlib::matrixnorm (
             complex(kind=dp), dimension(:,:)  c )
```

3.1.2.8 outerproduct()

```
complex(kind=dp) function, dimension(2,2) olis_f90stdlib::outerproduct (
             complex(kind=dp), dimension(:), intent(in) a,
             complex(kind=dp), dimension(:), intent(in) b )
```

3.1.2.9 printvectors()

```
subroutine olis_f90stdlib::printvectors (
             complex(kind=dp), dimension(:,:), intent(in) vect,
             character(len=*), intent(in), optional desc,
             integer, intent(in), optional f )
```

3.1.2.10 randseed()

```
subroutine olis_f90stdlib::randseed (
             integer, dimension(:), allocatable seed )
```

Chapter 4

File Documentation

4.1 olis_f90stdlib.f90 File Reference

Modules

- module olis_f90stdlib

Functions/Subroutines

- subroutine olis_f90stdlib::alloc_complex_eigenvects (matrix, eigenvals, u, v)
- subroutine olis_f90stdlib::alloc_complex_svd (matrix, sigma, u, vt)
- subroutine olis_f90stdlib::randseed (seed)
- subroutine olis_f90stdlib::printvectors (vect, desc, f)
- complex(kind=dp) function, dimension(2, 2) olis_f90stdlib::outerproduct (a, b)
- complex(kind=dp) function olis_f90stdlib::complextrace (a)
- subroutine olis_f90stdlib::complex_eigenvects (a, w, vl, vr)
- subroutine olis_f90stdlib::complex_svd (a, sigma, u, vt)
- complex(kind=dp) function, dimension(2, 2) olis_f90stdlib::c_inv2 (m_in)
- real(kind=dp) function olis_f90stdlib::matrixnorm (c)

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