tf.self_adjoint_eigvals

Aliases:

- `tf.linalg.eigvalsh`
- `tf.self_adjoint_eigvals`

```
self_adjoint_eigvals(
    tensor,
    name=None
)
```

Defined in `tensorflow/python/ops/linalg_ops.py`.

See the guide: Math > Matrix Math Functions

Computes the eigenvalues of one or more self-adjoint matrices.

★ **Note:** If your program backpropagates through this function, you should replace it with a call to tf.self_adjoint_eig (possibly ignoring the second output) to avoid computing the eigen decomposition twice. This is because the eigenvectors are used to compute the gradient w.r.t. the eigenvalues. See _SelfAdjointEigV2Grad in linalg_grad.py.

Args:

- `tensor`: `Tensor` of shape `[..., N, N]`.
- `name`: string, optional name of the operation.

Returns:

- `e`: Eigenvalues. Shape is `[..., N]`. The vector `e[..., :]` contains the `N` eigenvalues of `tensor[..., :, :]`.

Last updated November 2, 2017.