0.1 DiracEquation

`DiracEquation[exp]` applies the Dirac equation without expanding exp. If expansions are necessary, use **`DiracSimplify`**.

0.1.1 See also

Overview

0.1.2 Examples

```
GS[p] . SpinorU[p, m]

DiracSimplify[%]
```

$$(\bar{\gamma} \cdot \overline{p}) .u(p, m)$$

$$m\,(\varphi(\overline{p}, m))$$

```
GS[p] . SpinorU[p, m]

DiracEquation[%]
```

$$(\bar{\gamma} \cdot \overline{p}) .u(p, m)$$

$$m\,(\varphi(\overline{p}, m))$$

```
GS[p] . SpinorV[p, m]

DiracEquation[%]
```

$$(\bar{\gamma} \cdot \overline{p}) .v(p, m)$$

$$-m\,(\varphi(-\overline{p}, m))$$

```
SpinorUBar[p, 0] . GS[p]

DiracEquation[%]
```

$$\bar{u}(p).(\bar{\gamma}\cdot\overline{p})$$

$$0$$

DiracEquation also works in D-dimensions

```
SpinorVBarD[p, m] . GSD[p]

DiracEquation[%]
```

$$\bar{v}(p,m).(\gamma\cdot p)$$

$$-m(\varphi(-p,m))$$