#### 1 Flip-Flop

$ar{\eta}$ table	$ar{\eta}_{\mathrm{same}}$	$ar{\eta}_{ m diff}^{ m close}$	$ar{\eta}_{ m diff}^{ m far}$
$ \pm 1\rangle$ basis	$\frac{2}{3\sqrt{3}} = 0.3849$	0.6507	0.8328
$ +/-\rangle$ basis (no correlations)	0.7110	0.6828	0.6828
$ +/-\rangle$ basis (full correlations)	$\frac{4}{3\sqrt{3}} = 0.7698$	0.6951	0.6951

## Degeneracy formulae:

- no degeneracies :  $\bar{\eta} = \frac{1}{4}\bar{\eta}_{\text{same}}$
- $1x2x1 / \{1,1,0\}$  planes :  $\bar{\eta} = \frac{1}{4}\bar{\eta}_{same} + \frac{1}{4}\bar{\eta}_{diff}^{far}$
- 2x2 / {1,0,0} planes :  $\bar{\eta} = \frac{1}{4}\bar{\eta}_{\text{same}} + \frac{1}{4}\bar{\eta}_{\text{diff}}^{\text{close}}$
- $3x1 / \langle 1, 1, 1 \rangle$  directions :  $\bar{\eta} = \frac{1}{4} \bar{\eta}_{\text{same}} + \frac{2}{4} \bar{\eta}_{\text{diff}}^{\text{far}}$
- $4x0 / \langle 1, 0, 0 \rangle$  directions:  $\bar{\eta} = \frac{1}{4} \bar{\eta}_{\text{same}} + \frac{2}{4} \bar{\eta}_{\text{diff}}^{\text{close}} + \frac{1}{4} \bar{\eta}_{\text{diff}}^{\text{far}}$

## Numerical Values:

- $\begin{array}{l} -\text{ no degeneracies}: \bar{\eta}^2 = 9.259 \cdot 10^{-3} = \bar{\eta}_0^2 \\ -1\text{x2x1}: \bar{\eta}^2 = 9.267 \cdot 10^{-2} = 10.0 \cdot \bar{\eta}_0^2 \\ -2\text{x2}: \bar{\eta}^2 = 6.703 \cdot 10^{-2} = 7.24 \cdot \bar{\eta}_0^2 \\ -3\text{x1}: \bar{\eta}^2 = 0.2628 = 28.4 \cdot \bar{\eta}_0^2 \\ -4\text{x0} \mid \pm 1 \rangle \text{ basis}: \bar{\eta}^2 = 0.3966 = 42.8 \cdot \bar{\eta}_0^2 \\ -4\text{x0} \mid +/- \rangle \text{ basis (no correlations)}: \bar{\eta}^2 = 0.4759 = 51.4 \cdot \bar{\eta}_0^2 \\ -4\text{x0} \mid +/- \rangle \text{ basis (full correlations)}: \bar{\eta}^2 = 0.5094 = 55.0 \cdot \bar{\eta}_0^2 \end{array}$

#### $\mathbf{2}$ Double quantum

$\bar{\eta}$ table	$\bar{\eta}_{\mathrm{same}}$	$ar{\eta}_{ m diff}^{ m close}$	$ar{\eta}_{ ext{diff}}^{ ext{far}}$
$ \pm 1\rangle$ basis	1	0.8328	0.6507
$ +/-\rangle$ basis (no correlations)	0.7110	0.6828	0.6828
$ +/-\rangle$ basis (full correlations)	0.6366	0.6705	0.6705

## Numerical Values:

- $\begin{array}{ll} & 4 \mathrm{x} 0 \ | \pm 1 \rangle \ \mathrm{basis} : \bar{\eta}^2 = 0.6874 = 74.2 \cdot \bar{\eta}_0^2 \\ & 4 \mathrm{x} 0 \ | + / \rangle \ \mathrm{basis} \ (\mathrm{no \ correlations}) : \bar{\eta}^2 = 0.4759 = 51.4 \cdot \bar{\eta}_0^2 \\ & 4 \mathrm{x} 0 \ | + / \rangle \ \mathrm{basis} \ (\mathrm{full \ correlations}) : \bar{\eta}^2 = 0.4383 = 47.3 \cdot \bar{\eta}_0^2 \end{array}$

### Flip-flop + DQ3

$\bar{\eta}$ table	$\bar{\eta}_{\mathrm{same}}$	$ar{\eta}_{ m diff}^{ m close}$	$ar{\eta}_{ m diff}^{ m far}$
$ \pm 1\rangle$ basis	1.1405	1.1293	1.1293
$ +/-\rangle$ basis (no correlations)	1.11674	1.07235	1.07235
$ +/-\rangle$ basis (full correlations)	1.11674	1.07235	1.07235

- $\begin{array}{l} 4 \overline{\text{x0}} \mid \pm 1 \rangle \text{ basis} : \bar{\eta}^2 = 1.28165 = 138.42 \cdot \bar{\eta}_0^2 \\ 4 \overline{\text{x0}} \mid +/- \rangle \text{ basis (no correlations)} : \bar{\eta}^2 = 1.1738 = 126.78 \cdot \bar{\eta}_0^2 \\ 4 \overline{\text{x0}} \mid +/- \rangle \text{ basis (full correlations)} : \bar{\eta}^2 = 1.1738 = 126.78 \cdot \bar{\eta}_0^2 \end{array}$

# Flip-flop $+~0.5~\mathrm{DQ}$

$\bar{\eta}$ table	$\bar{\eta}_{\mathrm{same}}$	$ar{\eta}_{ m diff}^{ m close}$	$ar{\eta}_{ m diff}^{ m far}$
$ \pm 1\rangle$ basis	0.8702	0.9373	1.0074
$ +/-\rangle$ basis (no correlations)	0.96022	0.9220	0.9220
$ +/-\rangle$ basis (full correlations)	0.9816	0.9262	0.9262

 $<sup>\</sup>begin{array}{l} -4x0 \mid \pm 1 \rangle \text{ basis : } \bar{\eta}^2 = 0.8799 = 95.035 \cdot \bar{\eta}_0^2 \\ -4x0 \mid +/- \rangle \text{ basis (no correlations) : } \bar{\eta}^2 = 0.8678 = 93.7 \cdot \bar{\eta}_0^2 \\ -4x0 \mid +/- \rangle \text{ basis (full correlations) : } \bar{\eta}^2 = 0.8836 = 95.44 \cdot \bar{\eta}_0^2 \\ \end{array}$