

# $\Sigma(2620)$ Bumps

$I(J^P) = 1(?^?)$  Status: \*\*

OMITTED FROM SUMMARY TABLE

## $\Sigma(2620)$ MASS

| <u>VALUE (MeV)</u>                            | <u>DOCUMENT ID</u> | <u>TECN</u> | <u>COMMENT</u>                |
|---|--------------------|-------------|-------------------------------|
| <b><math>\approx 2620</math> OUR ESTIMATE</b> |                    |             |                               |
| $2542 \pm 22$                                 | DIBIANCA           | 75 DBC      | $K^- N \rightarrow \Xi K \pi$ |
| $2620 \pm 15$                                 | ABRAMS             | 70 CNTR     | $K^- p, K^- d$ total          |

## $\Sigma(2620)$ WIDTH

| <u>VALUE (MeV)</u> | <u>DOCUMENT ID</u> | <u>TECN</u> | <u>COMMENT</u>                |
|--------------------|--------------------|-------------|-------------------------------|
| $221 \pm 81$       | DIBIANCA           | 75 DBC      | $K^- N \rightarrow \Xi K \pi$ |
| 175                | ABRAMS             | 70 CNTR     | $K^- p, K^- d$ total          |

## $\Sigma(2620)$ DECAY MODES

| Mode                      |
|---------------------------|
| $\Gamma_1 \quad N\bar{K}$ |

## $\Sigma(2620)$ BRANCHING RATIOS

| $(J+\frac{1}{2}) \times \Gamma(N\bar{K}) / \Gamma_{\text{total}}$ | $\Gamma_1 / \Gamma$ |             |                        |
|---|---------------------|-------------|------------------------|
| <u>VALUE</u>  | <u>DOCUMENT ID</u>  | <u>TECN</u> | <u>COMMENT</u>         |
| 0.32  | ABRAMS              | 70 CNTR     | $K^- p, K^- d$ total   |
| $0.36 \pm 0.12$   | BRICMAN             | 70 CNTR     | Total, charge exchange |

## $\Sigma(2620)$ REFERENCES

|          |      |                |                            |                    |
|----------|------|----------------|----------------------------|--------------------|
| DIBIANCA | 75   | NP B98 137     | F.A. Dibianca, R.J. Endorf | (CMU)              |
| ABRAMS   | 70   | PR D1 1917     | R.J. Abrams <i>et al.</i>  | (BNL) I            |
|          | Also | 67E PRL 19 678 | R.J. Abrams <i>et al.</i>  | (BNL)              |
| BRICMAN  | 70   | PL 31B 152     | C. Bricman <i>et al.</i>   | (CERN, CAEN, SACL) |