

TABLE I: Predicted spectra of pentaquarks $bbbn\bar{n}$.

| State | J^P | R_0 | M_{bag} | μ_{bag} |
|---------------|---------|------------------|-----------|---------------------|
| $bbbn\bar{n}$ | $5/2^-$ | 5.01 | 15.796 | 2.42, -0.26, -2.94 |
| | | 3/2 ⁻ | 15.967 | 2.57, -0.09, -2.74 |
| | $1/2^-$ | 5.01 | 15.796 | 0.88, -0.19, -1.26 |
| | | 4.85 | 15.377 | -0.25, -0.26, -0.26 |
| | | 5.03 | 16.032 | 0.49, 0.27, 0.05 |
| | | 4.94 | 15.957 | 1.21, -0.32, -1.85 |
| | | 5.00 | 15.792 | -1.02, -0.14, 0.73 |

TABLE II: Predicted spectra of pentaquarks $bbbn\bar{s}$.

| State | J^P | R_0 | M_{bag} | μ_{bag} |
|---------------|---------|------------------|-----------|--------------|
| $bbbn\bar{s}$ | $5/2^-$ | 5.07 | 15.938 | 2.25, -0.47 |
| | | 3/2 ⁻ | 16.061 | 2.39, -0.29 |
| | $1/2^-$ | 5.07 | 15.938 | 0.81, -0.27 |
| | | 4.85 | 15.597 | -0.25, -0.26 |
| | | 5.08 | 16.115 | 0.57, -0.71 |
| | | 5.00 | 16.047 | 1.00, 0.51 |
| | | 5.05 | 15.934 | -0.96, -0.07 |

TABLE III: Predicted spectra of pentaquarks $bbbs\bar{n}$.

| State | J^P | R_0 | M_{bag} | μ_{bag} |
|---------------|---------|------------------|-----------|--------------|
| $bbbs\bar{n}$ | $5/2^-$ | 5.07 | 15.938 | -0.05, -2.76 |
| | | 3/2 ⁻ | 16.059 | 0.12, -2.56 |
| | $1/2^-$ | 5.07 | 15.938 | -0.10, -1.19 |
| | | 4.85 | 15.597 | -0.26, -0.26 |
| | | 5.08 | 16.115 | -0.71, 0.15 |
| | | 4.99 | 16.052 | 0.76, -1.81 |
| | | 5.05 | 15.933 | -0.20, 0.66 |

TABLE IV: Predicted spectra of pentaquarks $bbbs\bar{s}$.

| State | J^P | R_0 | M_{bag} | μ_{bag} |
|---------------|---------|------------------|-----------|-------------|
| $bbbs\bar{s}$ | $5/2^-$ | 5.11 | 16.085 | -0.26 |
| | | 3/2 ⁻ | 16.153 | -0.09 |
| | $1/2^-$ | 5.11 | 16.085 | -0.19 |
| | | 4.87 | 15.805 | -0.26 |
| | | 5.12 | 16.201 | -0.64 |
| | | 5.03 | 16.144 | 0.55 |
| | | 5.09 | 16.079 | -0.12 |

TABLE V: Predicted spectra of pentaquarks $bbcn\bar{n}$.

| State | J^P | R_0 | M_{bag} | μ_{bag} |
|---------------|---------|-------|-----------|---------------------|
| $bbcn\bar{n}$ | $5/2^-$ | 5.16 | 12.619 | 3.09, 0.33, -2.44 |
| | | 5.16 | 12.463 | 3.10, 0.33, -2.44 |
| | $3/2^-$ | 5.16 | 12.645 | 1.25, 0.34, -0.57 |
| | | 5.16 | 12.619 | 2.58, 0.35, -1.87 |
| | | 5.16 | 12.596 | 2.02, 0.06, -1.91 |
| | | 5.16 | 12.503 | 1.61, -0.01, -1.64 |
| | | 5.16 | 12.461 | 1.57, 0.37, -0.83 |
| | | 5.16 | 12.446 | 2.21, -0.36, -2.92 |
| | | 5.16 | 12.047 | 0.34, 0.32, 0.31 |
| | | 5.16 | 12.685 | 1.03, 0.74, 0.45 |
| | $1/2^-$ | 5.16 | 12.647 | -0.11, -0.10, 0.08 |
| | | 5.16 | 12.584 | 1.58, 0.09, -1.40 |
| | | 5.16 | 12.574 | 1.33, -0.28, -1.89 |
| | | 5.16 | 12.479 | -0.72, 0.10, 0.51 |
| | | 5.16 | 12.453 | 0.89, 0.48, 0.06 |
| | | 5.16 | 12.443 | 0.28, -0.23, -0.73 |
| | | 5.16 | 12.034 | -0.28, -0.28, -0.28 |

TABLE VI: Predicted spectra of pentaquarks $bbcn\bar{s}$.

| State | J^P | R_0 | M_{bag} | μ_{bag} |
|---------------|---------|-------|-----------|--------------|
| $bbcn\bar{s}$ | $5/2^-$ | 5.20 | 12.720 | 2.90, 0.11 |
| | | 5.20 | 12.605 | 2.90, 0.11 |
| | $3/2^-$ | 5.20 | 12.739 | 1.10, 0.06 |
| | | 5.20 | 12.714 | 2.70, 0.29 |
| | | 5.20 | 12.698 | 1.66, 0.62 |
| | | 5.20 | 12.622 | 1.55, -0.77 |
| | | 5.20 | 12.603 | 1.52, 0.25 |
| | | 5.20 | 12.587 | 1.95, -0.55 |
| | | 5.20 | 12.272 | 0.33, 0.33 |
| | $1/2^-$ | 5.20 | 12.768 | 1.07, -0.44 |
| | | 5.20 | 12.741 | -0.02, -0.34 |
| | | 5.20 | 12.686 | 1.55, 0.39 |
| | | 5.20 | 12.666 | 1.01, 0.32 |
| | | 5.20 | 12.597 | -0.01, 0.26 |
| | | 5.20 | 12.594 | 0.03, 0.37 |
| | | 5.20 | 12.586 | 0.39, -0.27 |
| | | 5.20 | 12.259 | -0.28, -0.28 |

TABLE VII: Predicted spectra of pentaquarks $bbcs\bar{n}$.

| State | J^P | R_0 | M_{bag} | μ_{bag} |
|---------------|---------|-------|-----------|--------------|
| $bbcs\bar{n}$ | $5/2^-$ | 5.20 | 12.713 | 0.55, -2.24 |
| | | 5.20 | 12.605 | 0.55, -2.24 |
| | $3/2^-$ | 5.20 | 12.736 | 0.35, -0.84 |
| | | 5.20 | 12.715 | 0.74, -1.46 |
| | | 5.20 | 12.694 | 0.77, -1.83 |
| | | 5.20 | 12.615 | -0.26, -1.52 |
| | | 5.20 | 12.600 | 0.46, -1.33 |
| | | 5.20 | 12.577 | -0.46, -2.00 |
| | | 5.20 | 12.272 | 0.31, 0.31 |
| | $1/2^-$ | 5.20 | 12.774 | -0.32, 0.55 |
| | | 5.20 | 12.736 | -0.33, 0.08 |
| | | 5.20 | 12.686 | 0.85, -1.69 |
| | | 5.20 | 12.679 | 0.26, -1.39 |
| | | 5.20 | 12.603 | -0.01, 0.65 |
| | | 5.20 | 12.594 | 0.49, -1.00 |
| | | 5.20 | 12.564 | -0.07, 0.15 |
| | | 5.20 | 12.258 | -0.27, -0.28 |

TABLE VIII: Predicted spectra of pentaquarks $bbcs\bar{s}$.

| State | J^P | R_0 | M_{bag} | μ_{bag} |
|---------------|---------|-------|-----------|-------------|
| $bbcs\bar{s}$ | $5/2^-$ | 5.23 | 12.813 | 0.33 |
| | | 5.23 | 12.752 | 0.33 |
| | $3/2^-$ | 5.23 | 12.831 | 0.17 |
| | | 5.23 | 12.811 | 0.51 |
| | | 5.23 | 12.796 | 0.60 |
| | | 5.23 | 12.751 | 0.38 |
| | | 5.23 | 12.736 | -0.19 |
| | | 5.23 | 12.717 | -0.71 |
| | | 5.23 | 12.484 | 0.32 |
| | $1/2^-$ | 5.23 | 12.860 | -0.32 |
| | | 5.23 | 12.833 | -0.26 |
| | | 5.23 | 12.786 | 0.47 |
| | | 5.23 | 12.775 | 0.28 |
| | | 5.23 | 12.741 | 0.50 |
| | | 5.23 | 12.734 | 0.12 |
| | | 5.23 | 12.696 | 0.04 |
| | | 5.23 | 12.470 | -0.27 |

TABLE IX: Predicted spectra of pentaquarks $ccbn\bar{n}$.

| State | J^P | R_0 | M_{bag} | μ_{bag} |
|---------------|---------|-------|-----------|---------------------|
| $ccbn\bar{n}$ | $5/2^-$ | 5.34 | 9.281 | 3.77, 0.92, -1.94 |
| | | 5.34 | 9.126 | 3.77, 0.92, -1.94 |
| | $3/2^-$ | 5.34 | 9.313 | 1.61, 0.96, 0.32 |
| | | 5.34 | 9.253 | 3.55, 0.94, -1.68 |
| | | 5.34 | 9.214 | 1.57, -0.04, -1.66 |
| | | 5.34 | 9.181 | 2.36, 0.34, -1.68 |
| | | 5.34 | 9.124 | 2.04, 0.82, -0.40 |
| | | 5.34 | 9.113 | 3.28, 0.56, -2.16 |
| | | 5.33 | 8.712 | 0.93, 0.91, 0.88 |
| | $1/2^-$ | 5.34 | 9.324 | 1.20, 0.87, 0.54 |
| | | 5.34 | 9.299 | -0.07, -0.06, -0.06 |
| | | 5.34 | 9.203 | 1.15, -0.18, -1.51 |
| | | 5.34 | 9.172 | 1.89, 0.03, -1.82 |
| | | 5.34 | 9.144 | -0.29, 0.24, 0.77 |
| | | 5.34 | 9.109 | 0.97, 0.48, -0.02 |
| | | 5.34 | 9.087 | 0.14, -0.18, -0.49 |
| | | 5.34 | 8.699 | 0.71, 0.69, 0.68 |

TABLE X: Predicted spectra of pentaquarks $ccbn\bar{s}$.

| State | J^P | R_0 | M_{bag} | μ_{bag} |
|---------------|---------|-------|-----------|-------------|
| $ccbn\bar{s}$ | $5/2^-$ | 5.37 | 9.444 | 3.56, 0.68 |
| | | 5.37 | 9.269 | 3.56, 0.68 |
| | $3/2^-$ | 5.37 | 9.467 | 1.67, 0.20 |
| | | 5.37 | 9.421 | 3.37, 0.52 |
| | | 5.37 | 9.373 | 1.33, 0.95 |
| | | 5.37 | 9.356 | 2.19, -0.04 |
| | | 5.37 | 9.267 | 1.90, 0.69 |
| | | 5.37 | 9.256 | 3.14, 0.38 |
| | | 5.37 | 8.940 | 0.93, 0.91 |
| | $1/2^-$ | 5.37 | 9.476 | 1.31, -0.21 |
| | | 5.37 | 9.447 | -0.08, 0.10 |
| | | 5.37 | 9.363 | 0.92, 0.74 |
| | | 5.37 | 9.345 | 1.79, -0.32 |
| | | 5.37 | 9.312 | -0.34, 0.33 |
| | | 5.37 | 9.255 | 0.75, 0.57 |
| | | 5.37 | 9.241 | 0.37, -0.32 |
| | | 5.37 | 8.927 | 0.70, 0.69 |

TABLE XI: Predicted spectra of pentaquarks $ccbs\bar{n}$.

| State | J^P | R_0 | M_{bag} | μ_{bag} |
|---------------|---------|-------|-----------|--------------|
| $ccbs\bar{n}$ | $5/2^-$ | 5.37 | 9.442 | 1.15, -1.72 |
| | | 5.37 | 9.269 | 1.15, -1.72 |
| | $3/2^-$ | 5.37 | 9.466 | 0.40, 0.30 |
| | | 5.37 | 9.415 | 0.91, -1.43 |
| | | 5.37 | 9.387 | 1.33, -1.49 |
| | | 5.37 | 9.346 | 0.12, -1.52 |
| | | 5.37 | 9.267 | 0.92, -0.32 |
| | | 5.37 | 9.256 | 0.80, -1.97 |
| | | 5.37 | 8.940 | 0.91, 0.89 |
| | $1/2^-$ | 5.37 | 9.476 | -0.20, 0.61 |
| | | 5.37 | 9.452 | 0.18, -0.10 |
| | | 5.37 | 9.376 | 0.99, -1.47 |
| | | 5.37 | 9.341 | -0.27, -1.57 |
| | | 5.37 | 9.316 | 0.41, 0.79 |
| | | 5.37 | 9.254 | 0.61, 0.18 |
| | | 5.37 | 9.238 | -0.21, -0.75 |
| | | 5.37 | 8.927 | 0.69, 0.68 |

TABLE XII: Predicted spectra of pentaquarks $ccbs\bar{s}$.

| State | J^P | R_0 | M_{bag} | μ_{bag} |
|---------------|---------|-------|-----------|-------------|
| $ccbs\bar{s}$ | $5/2^-$ | 5.40 | 9.605 | 0.92 |
| | | 5.40 | 9.416 | 0.92 |
| | $3/2^-$ | 5.40 | 9.622 | 0.34 |
| | | 5.40 | 9.582 | 0.72 |
| | | 5.40 | 9.547 | 1.16 |
| | | 5.40 | 9.520 | -0.02 |
| | | 5.40 | 9.415 | 0.77 |
| | | 5.40 | 9.405 | 0.62 |
| | | 5.40 | 9.154 | 0.91 |
| | $1/2^-$ | 5.40 | 9.630 | -0.11 |
| | | 5.40 | 9.603 | 0.09 |
| | | 5.40 | 9.537 | 0.83 |
| | | 5.40 | 9.513 | -0.39 |
| | | 5.40 | 9.487 | 0.34 |
| | | 5.40 | 9.405 | 0.79 |
| | | 5.40 | 9.394 | -0.23 |
| | | 5.40 | 9.142 | 0.80 |

TABLE XIII: Predicted spectra of pentaquarks $cccn\bar{n}$.

| State | J^P | R_0 | M_{bag} | μ_{bag} |
|---------------|---------|-------|-----------|--------------------|
| $cccn\bar{n}$ | $5/2^-$ | 5.56 | 5.786 | 1.19, 0.88, 0.36 |
| | $3/2^-$ | 5.55 | 5.854 | 3.45, 0.52, -2.42 |
| | | 5.56 | 5.786 | 2.30, 1.11, -0.08 |
| | | 5.42 | 5.372 | 1.53, 1.49, 1.46 |
| | | 5.67 | 5.963 | 1.15, 0.84, 0.53 |
| | $1/2^-$ | 5.52 | 5.827 | 1.01, -0.16, -1.32 |
| | | 5.44 | 5.741 | 0.03, 0.49, 0.96 |

TABLE XIV: Predicted spectra of pentaquarks $cccn\bar{s}$.

| State | J^P | R_0 | M_{bag} | μ_{bag} |
|---------------|---------|---------|-----------|--------------|
| $cccn\bar{s}$ | $5/2^-$ | 5.60 | 5.929 | 4.25, 1.26 |
| | | $3/2^-$ | 5.57 | 5.971 |
| | $1/2^-$ | 5.59 | 5.928 | 0.99, -0.35 |
| | | 5.41 | 5.599 | -0.22, -0.25 |
| | | 5.69 | 6.063 | 1.15, -0.31 |
| | | 5.56 | 5.940 | 0.89, 0.34 |
| | | 5.46 | 5.877 | 0.08, 1.04 |

TABLE XV: Predicted spectra of pentaquarks $cccs\bar{n}$.

| State | J^P | R_0 | M_{bag} | μ_{bag} |
|---------------|---------|---------|-----------|-------------|
| $cccs\bar{n}$ | $5/2^-$ | 5.59 | 5.929 | 1.76, -1.23 |
| | | $3/2^-$ | 5.57 | 5.964 |
| | $1/2^-$ | 5.59 | 5.928 | 1.26, -0.10 |
| | | 5.41 | 5.600 | 1.49, 1.45 |
| | | 5.69 | 6.063 | -0.34, 0.68 |
| | | 5.57 | 5.956 | 0.58, -0.90 |
| | | 5.46 | 5.875 | 0.99, 0.46 |

TABLE XVI: Predicted spectra of pentaquarks $cccs\bar{s}$.

| State | J^P | R_0 | M_{bag} | μ_{bag} | |
|---------------|---------|---------|-----------|-------------|-------|
| $cccs\bar{s}$ | $5/2^-$ | 5.62 | 6.078 | 1.51 | |
| | | $3/2^-$ | 5.59 | 6.079 | 0.53 |
| | $1/2^-$ | | 5.62 | 6.078 | 1.11 |
| | | | 5.41 | 5.811 | 1.48 |
| | | | 5.72 | 6.168 | -0.08 |
| | | | 5.60 | 6.074 | 0.25 |
| | | | | | |
| | | | 5.48 | 6.008 | 0.99 |