

Abstract for an Invited Paper
for the APR07 Meeting of
The American Physical Society

Charm Spectroscopy.

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Recent experimental results in charm spectroscopy are discussed. During the last few years many new D , D_s , charmonium, and charmed baryon excited states have been discovered. Some of these states were not expected theoretically; their masses, widths, quantum numbers, and decay modes did not fit the existing spectroscopic classification, which was based mostly on potential model calculations. The theoretical models have been improved and new approaches have been developed to explain the data; the possibility of a non-quark-antiquark interpretation of these states has also been widely discussed. To begin, a short overview of theoretical models used to describe charm spectroscopy will be presented. Then, recent results on excited D and D_s meson production will be reported. The specific behaviour of the D_{sJ} mesons will be discussed. A significant part of this talk will be devoted to charmonium spectroscopy. Although the nature of the newly discovered charmonium resonances is not yet fully understood, the $X(3872)$ and $Y(4260)$ resonances are interpreted as molecular or hybrid states in most theoretical papers. If this interpretation is confirmed by future measurements, it will have a revolutionary impact on particle physics. In the last part of the talk recent results in charm baryon spectroscopy will be reported.