Figure VII.5: The de Casteljau method for computing $q(u)$ for $q$ a degree three Bézier curve is the basis for finding the new points needed for recursive subdivision. Shown here is the $u = 1/2$ case. The points $p_0, r_0, s_0, t_0$ are the control points for the Bézier curve $q_1(u)$ which is equal to the first half of the curve $q(u)$, i.e., starting at $p_0$ and ending at $t_0$. The points $t_0, s_1, r_2, p_3$ are the control points for the curve $q_2(u)$ equal to the second half of $q(u)$, i.e., starting at $t_0$ and ending at $p_3$. 