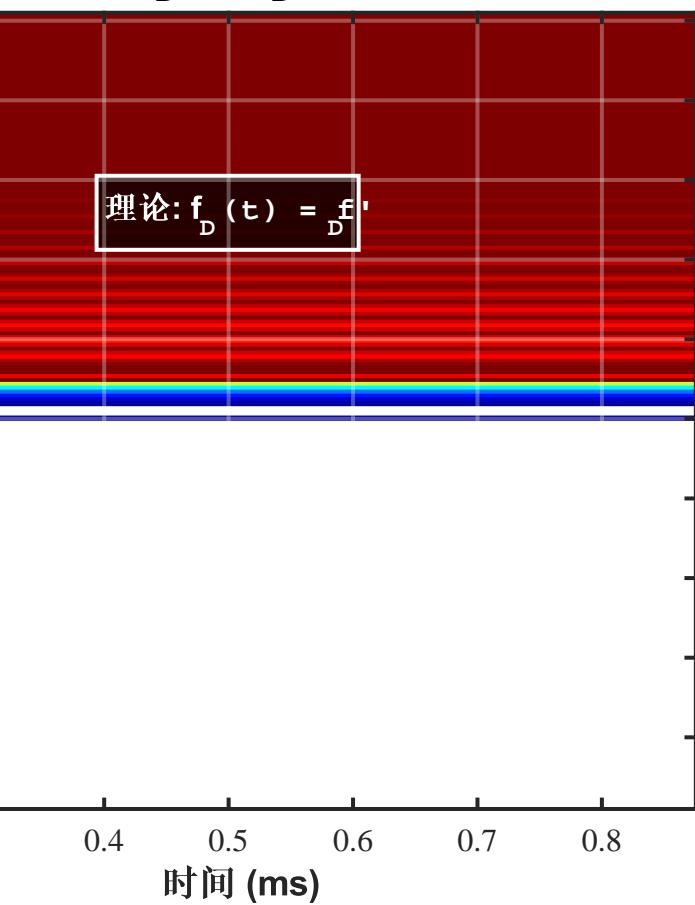


图3-2 差频信号瞬时频率演化的时频分析对比：水平线 vs 斜线

(a) 无色散：瞬时频率恒定

$$\alpha = 0, f_D(t) = f'_D \text{ (水平线)}$$



(b) 强色散：瞬时频率随时间变化

$$f_p = 29 \text{ GHz}, \alpha \neq 0 \text{ (斜线)}$$

