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用Adomian分解法求解分数阻尼梁的解析解

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摘要：利用Adomian分解法， 得到了由任意阶分数微分描述的具有阻尼特性的黏弹性连续梁的解析解. 解中包含了任意的初始条件和零输入. 为了更明确的分析， 假定初始条件是奇次的，输入受力是针对某种特定梁的特殊过程. 分别考虑了两种简单情况下梁的响应：阶跃激励和脉冲激励. 然后在系统的不同组参数条件下绘制了梁的位移图，并且讨论了梁在不同微分阶数下响应情况.

关键词：黏弹性梁;分数微分;Adomian分解法;振动
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