ERRATA CORRIGE

Solutions of Minimal Period for a Semilinear Wave Equation (*).

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Let $\bar{u}(t, x)$ be a solution of the following wave equation

$$u_{tt} - u_{xx} + g(u) = 0 \quad t \in \mathbb{R}, \quad x \in [0, \pi]$$

under boundary and periodicity conditions

$$\begin{cases} u(t, 0) = u(t, \pi) = 0 \\ u(t, x) = u(t + T, x) \end{cases} \quad t \in \mathbb{R}, \quad x \in [0, \pi].$$

In the proof of Theorem 1.7 we say that if $\bar{u}(t, x)$ is T/n -periodic in t , there exist at least $n - 1$ points conjugate to 0 in $]0, T[$, namely $\{T/n, 2T/n, \dots, (n - 1)T/n\}$. However this is true if $\bar{u}(t, x)$ verifies the additional condition $\bar{u}(t, 0) = \bar{u}(t, \pi/n) = \dots = \bar{u}(t, (n - 1)\pi/n) = \bar{u}(t, \pi) = 0$.

Therefore the proof of the relation between $m(\bar{v})$ and $O(\bar{u})$ stated in Theorem 1.7 holds if we modify the definition of $O(\bar{u})$ as follows:

« $O(\bar{u})$ is the greatest integer n such that $\bar{u}(t, x)$ is T/n -periodic in t and

$$\bar{u}(t, 0) = \bar{u}(t, \pi/n) = \dots = \bar{u}(t, (n - 1)\pi/n) = \bar{u}(t, \pi) = 0. »$$

That implies that the solution $\bar{u}$ found in Theorem 0.3 and 0.4 in general does not have minimal period T , but it verifies a « minimality » condition in the variables (t, x) , more precisely it does not exist any $n \in \mathbb{N}$ such that $\bar{u}(t, x)$ is T/n -periodic in t and $\bar{u}(t, 0) = \bar{u}(t, \pi/n) = \dots = \bar{u}(t, (n - 1)\pi/n) = \bar{u}(t, \pi) = 0$.

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