

## Code B\_2720

<b>Department</b>	Economics and Business Science
<b>UniCa reference person</b>	Beatrice Venturi
<b>Project title in English</b>	Economics implications in the Analysis of boundary Conditions of Optimal Control Models
<b>Project title in Italian</b>	Implicazioni economiche nell'analisi delle condizioni al bordo di modelli di controllo ottimali
<b>Subject area of reference (World University Ranking)</b>	BUSINESS AND ECONOMICS
<b>Project summary and VPS' profile</b>	<p>The literature has extensively studied transient interior solutions and steady state solutions for constant capital growth and associated stability issues in Optimal Control Analysis. Unlike these studies we address boundary solutions, which are normally disregarded, for a class of Optimal Control Model, that represents an extension of the classical Lucas Model. In particular, we are looking for a threshold condition when for a given level of technology and human capital there is not sufficient physical capital. This implies that an optimal path can contain a boundary solution of no consumption (i.e., only consumption for basic sustainability). Our goal is to determine if a policy like this can exist for a certain amount of time and without any training, thereby involving all human resources in the production of physical capital.</p>
<b>Proposed length of stay</b>	Long visit of 1 month
<b>Expected period of activity</b>	September - October 2024
<b>Academic position of the VPS'</b>	Professor
<b>Course of Study</b>	Laurea triennale (1st cycle University Degree), Dottorato di ricerca (PhD Course)
<b>Language of instruction</b>	English