**Unlocking the potential of environmental liability in transformational times**

It is fairly well known in the field of Law and Economics that human activities that cause risk of harm can be controlled either by liability law or by regulation. While tort liability works in an indirect way through the deterrent effect of damage actions, standards and regulations aim at directly modifying behaviours independently from the occurrence of harm. From an economic standpoint, the choice between liability and regulation should rely on various factors, including differences in knowledge about risky activities (between private parties and regulatory agencies) and administrative costs incurred by private parties and the public in using one of the two tools. For instance, if private parties cannot predict how much they have to pay as a consequence of an environmental accident, liability would not be “efficient”\(^1\), hence making the adoption of regulations more desirable despite the higher costs of enforcement. In order to reduce \(\textit{ex ante}\) uncertainty in the calculation of ecological damages, most liability laws currently opt for restoration as a primary remedy. Yet, the deterrent effect of restoration remains unclear.

The aim of this presentation is twofold. First, it wishes to highlight the challenges of environmental liability laws when it comes to the assessment of ecological damages in litigation. More specifically, various methods of environmental damage assessment in economics are compared to show advantages and disadvantages for liability assessments. Among these methods, restoration seems to represent one of the easiest and quickest ways to assess damages. Yet, from an economic and ecological perspective, restoration costs do not fully cover the harm to the environment. This means that restoration is unlikely to efficiently deter potential polluters from committing damage.

Secondly, this presentation would like to make clear how a change in the design of the law is needed to enhance the efficiency of remedies. In particular, applying an ecosystem approach in damage assessment might open up a novel perspective over ecological damages. This new method has first appeared in the case law of the International Court of Justice in 2018 and it might unlock the potential of environmental liability of preventing accidents in transformational times.

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\(^1\) In the economic jargon, inefficient tort laws would provide potential polluters with suboptimal incentives of care and activity. In other words, polluters would not be induced to invest in care so that accidents are prevented.
**Short Bio**

I am currently enrolled in the European Doctorate of Law and Economics and my research project deals with the assessment of damages for environmental liability. My academic background is quite interdisciplinary. I first graduated in Law in Italy in 2014 and then I got my second LL.M. in European Legal Studies – Economic Analysis of Law at the College of Europe in Bruges. I also gained a degree in Social Sciences by attending one of the few schools of excellence for interdisciplinary studies spread around Italy (I.S.U.F.I. in Lecce). Regarding my work experience, I trained as a lawyer at the Public Attorney (18 months), then as a judge assistant at the Administrative Local Court (18 months) and finally at the Italian Antitrust Authority in Rome (8 months). I spent several months abroad to carry out research (first at the Ruprecht-Karls- Universität in Heidelberg and then at the École Normale Supérieure de Paris).

[150 words]