

Séance 51

Pricing motor insurance with telematics data

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Présentation

Many insurance companies collect telematics data about drivers' exposure to traffic (distance driven and type of road), their driving behavior (excess speed, aggressiveness, operating hours) and contextual information (weather conditions, traffic intensity). Actuaries can use this information to improve motor insurance ratemaking. Several recent proposals will be presented, mostly using traditional GLM models and addressing weekly ratemaking. Personalized driving risk indicators can also promote driving safety. Illustrations with several real data sets provided by insurance companies will answer questions: (1) How are pay-per-mile insurance schemes be designed? (2) How can near-miss telematics be used to identify risky drivers? (3) Can external factors such as weather conditions be integrated?

Intervenant :

Montserrat Guillen is Chair Professor of Quantitative Methods at the University of Barcelona (UB), where she is the director of the RISKcenter. She is PhD in Economics, MSc in Mathematical Statistics and MA in Data Analysis. She is a top-cited author in Actuarial Science and Insurance. Chief-editor of the North American Actuarial Journal since January 2023. Optimistic, she likes understanding data and mitigating risks. She loves having friends visiting Barcelona from around the world.

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La chaire PARI (programme sur l'appréhension des risques et des incertitudes), portée par l'ENSAE et Sciences Po, a pour objectif d'identifier et comprendre (i) le champ de pertinence de nos outils d'appréhension des risques, et (ii) leurs conditions d'émergence et d'utilisation. Créée début 2015, elle organise un séminaire de recherche mensuel de 2h pour présenter et échanger autour de ses travaux et des thématiques connexes. Le deuxième cycle de la chaire porte sur les enjeux du big data pour l'assurance.