|  |  |
| --- | --- |
| **Dr. Qiushi Chen**  Assistant Professor  GLENN DEPARTMENT OF  CIVIL ENGINEERING  Clemson University  109 Lowry Hall  Clemson, SC 29634  **P** 864-656-3300  **F** 864-656-2670  qiushi@clemson.edu | **Re: Authors’ Novelty Files**  “A Cartesian Parametrization for the Numerical Analysis of Material Instability”   * A new Cartesian parametrization is proposed for the numerical resolution of material stability analysis * The proposed method has no restrictions on the symmetry of material tangents and applies to both small- and finite-deformation material models * Numerical stability analysis on damage models provides insights on the performance of existing and newly proposed numerical approaches * The new parametrization demonstrates superior performance in computational efficiency and robustness * The proposed method has broader applications towards numerical material stability analysis |

*www.clemson.edu/ce*