



IFPRI BRIEF TEMPLATE

Check One: **Project** **Review** **Collaboration**
 Workshop **Other**

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|-----------------------------------|---|
| Descriptive Title | Horizons in Dry Granular Modelling: beyond DEM |
| Working Title¹ | Beyond DEM |
| Technical Area² | D Dry Systems |
| Date | 21 June 2021 |
| Short Description | The membership believes there is a need for a review paper on the current state-of-art for modeling of dynamics of particulate systems beyond the Discrete Element Method. |
| Objectives | |
| Scope | <p>Audience: educational review of pros/cons/regimes where different techniques are appropriate, inherent assumptions and limitations; should eventually be published publicly</p> <p>In: quasi-static → intermediate inertial number → collisional flows soft through hard particles adhesion/cohesion interstitial gas techniques for particular scenarios, <i>e.g.</i> resistive force theory, and well as general methods</p> <p>Out: interstitial liquid / suspensions Brownian systems</p> |

| Recommended Contractors (2 or 3) | | |
|---|-------------|--|
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|----------------------|--------------|
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¹ Title used in meeting agendas and file archives

² One or more from the following list: W = wet systems; D = dry systems; F = particle formation; SR = size reduction; M = modeling; SE = systems engineering

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