

Author Index

- Aifantis, E.C., 189
Aigner, E., 209
Ammar, A., 247
Askes, H., 189
Barth, F.G., 321
Bazilevs, Y., 1
Bennett, C.R., 151
Bennett, T., 189
Bittnar, Z., 61
Böhm, H.J., 321
Calo, V.M., 1
Cascón, G., 229
Cascón, J.M., 229
Chan, A.H.C., 335
Chinesta, F., 247
Cottrell, J.A., 1
Croft, T.N., 151
Cross, M., 151
De, S., 173
Dechant, H.-E., 321
Doltsinis, I., 295
Eberhardsteiner, J., 209
Eriksson, A., 127
Escobar, J.M., 229
Evans, J., 1
Eyheramendy, D., 17
Gebhardt, J.E., 151
Gitman, I.M., 189
Harlen, O., 81
Hößl, B., 321
Hughes, T.J.R., 1
Innocente, M.S., 103
Jimack, P.K., 81
Lackner, R., 209
Lamari, H., 247
Lipton, S., 1
Mackie, R.I., 41
Macri, M., 173
Mang, H.A., 209
McBride, D., 151
Montenegro, R., 229
Nikishkov, G.P., 271
Nishidate, Y., 271
Ou, J., 335
Oudin-Dardun, F., 17
Patzák, B., 61
Rammerstorfer, F.G., 321
Ranc, N., 247
Rodríguez, E., 229
Scott, M.A., 1
Sederberg, T.W., 1
Sienz, J., 103
Tenchev, R., 81
Walkley, M.A., 81
Wistuba, M., 209

Keyword Index

- adaptive refinement-derefinement, 229
- arachnids, 321
- arbitrary Lagrangian-Eulerian meshes, 81
- artificial intelligence, 103
- asphalt, 209
- atomic-scale, 271
- biomechanics, 321
- Biot formulation, 335
- bitumen, 209
- Brownian dynamics, 247
- component oriented, 41
- composites, 173
- computational fluid dynamics, 151
- computer aided design, 1
- cracking, 173, 209
- curse of dimensionality, 247
- deformation processes, 295
- distributed computing, 41
- earthquake, 335
- enrichment, 173
- finite elements, 17, 41, 81, 209, 229, 271, 321
- finite sums decompositions, 247
- fresh concrete casting, 61
- fresh concrete rheology, 61
- gradient elasticity, 189
- heap leaching, 151
- higher-order continuum, 189
- homogenization, 173
- human movements, 127
- identification, 209
- inelastic solids, 295
- interface-capturing, 61
- isogeometric analysis, 1
- kinetic theory, 247
- mechanisms, 127
- mesh smoothing, 229
- mesh untangling, 229
- model reduction, 247
- model validation, 151
- molecular dynamics, 247
- multi-physics, 17
- multi-scale, 173, 189, 209, 247
- muscular forces, 127
- nanostructure, 271
- nested meshes, 229
- non-linear mechanics, 17
- non-Newtonian flow, 61
- NURBS, 1
- object-oriented, 17, 41
- optimization, 103, 127
- parallel processing, 17, 41
- particle swarms, 103
- partition of unity, 173
- pavement, 209
- polymer melts, 81
- process modelling, 151
- quantum mechanics, 247
- rate sensitivity, 295
- reactive porous media, 151
- representative volume element, 189

- scheduling, 103
- self-positioning, 271
- sensors, 321
- separated representation, 247
- soil dynamics, 335
- soil-structure interaction, 335
- spiders, 321
- stability of evolution, 295
- statistical mechanics, 247

- T-splines, 1
- tetrahedral mesh generation, 229
- thermal loading, 209
- thermomechanical coupling, 295

- upscaling, 209

- validation, 209
- variably saturated flow, 151
- viscoelasticity, 81, 209

- wave dispersion, 189
- wave propagation, 189



