

Index of symbols

- $B_{\text{gl}}G$ - global classifying space of the compact Lie group G , 28
 Cf - mapping cone of f , 246
 Ff - homotopy fiber of f , 246
 $F(\mathbb{S})$ - evaluation of a Γ -space F on spheres, 439
 $F_{G,V}$ - semifree orthogonal spectrum generated by (G, V) , 361
 $GL_1(R)$ - global units of the ultra-commutative ring spectrum R , 477
 \mathbf{GT} - category of G -spaces, 736
 $G \rtimes_H -$ - external transfer, 266
 $G \rtimes_H A$ - induced based G -space, 229
 $G \rtimes_H Y$ - induced spectrum, 264
 HM - Eilenberg–Mac Lane spectrum of a global functor, 418
 $K \backslash G/H$ - double coset space, 310
 $L_m Y$ - m th latching object of Y , 801
 N_H^G - norm map, 465
 R^{naive} - naive units of the orthogonal monoid space R , 118
 $R_K(A)$ - cofree orthogonal space of a K -space A , 46
 V_C - complexification of the inner product space V , 61
 X_G - underlying G -spectrum of an orthogonal spectrum, 349
 $[m]$ - m th power operation in an ultra-commutative monoid, 112
 \square - box product of global functors, 381
 $\text{Cl}(V)$ - complexified Clifford algebra, 663
 $\text{Cl}(V)$ - Clifford algebra, 139
 $\Delta[1]$ - simplicial 1-simplex, 204
 Δ^n - topological n -simplex, 52
 \mathcal{F} - global family, 64
 $\mathcal{F}(K; G)$ - family of graph subgroups of $K \times G$, 26
 $\mathcal{F}(m)$ - subgroups of $O(m)$ belonging to \mathcal{F} , 64
 $\mathcal{F} \cap G$ - subgroups of G belonging to \mathcal{F} , 64
 $\mathcal{F}in$ - global family of finite groups, 400
 $\mathcal{H}A$ - Eilenberg–Mac Lane spectrum of an abelian group, 514
 $\mathcal{H}\mathbb{Z}$ - Eilenberg–Mac Lane spectrum of the integers, 516
 Ω^\bullet - underlying orthogonal space of an orthogonal spectrum, 352
 Φ_k^G - geometric fixed-point homotopy group, 288
 Σ^∞ - suspension spectrum of an orthogonal space, 353
 $\Sigma_m \wr G$ - wreath product, 112
 Sp^∞ - infinite symmetric product, 516
 Tr_H^G - dimension shifting transfer, 279
 \mathcal{U}_G - complete G -universe, 21
 $\text{Vect}_G(A)$ - monoid of isomorphism classes of G -vector bundles over A , 161
 $\mathcal{Z}(j)$ - set of pushout products of cylinder inclusions, 40
 \mathbf{A} - Burnside category, 368
 \mathbf{BO} - global BO , 158
 \mathbf{BOP} - periodic global BO , 157
 \mathbf{BSp} - global BSp , 185
 \mathbf{BSpP} - periodic global BSp , 185
 \mathbf{BU} - global BU , 185
 \mathbf{BUP} - periodic global BU , 185
 $\mathbf{\Delta}$ - simplicial index category, 52
 \mathbf{F} - ultra-commutative monoid of unordered frames, 151
 \mathbf{Gr} - additive Grassmannian, 142
 $\mathbf{Gr}^{\mathbb{C}}$ - complex additive Grassmannian, 145
 $\mathbf{Gr}^{\mathbb{H}}$ - quaternionic additive Grassmannian, 145
 \mathbf{Gr}^{or} - oriented Grassmannian, 144
 \mathbf{Gr}_\otimes - multiplicative Grassmannian, 147

- K** - category of k -spaces, 688
 $\mathbf{K}O_G(A)$ - equivariant K-group of A , 162
KU - periodic global K-theory, 666
 $\mathbf{K}_G(A)$ - equivariant K-group of A , 642
L - category of finite-dimensional inner product spaces, 2
 $L(V, W)$ - space of linear isometric embeddings, 2
 $L^{\mathbb{C}}(V, W)$ - space of \mathbb{C} -linear isometric embeddings, 62
 $L_{G,V}$ - semifree orthogonal space generated by (G, V) , 26
MGr - Thom spectrum over the additive Grassmannian, 546
MO - global Thom spectrum, 550
MOP - periodic global Thom spectrum, 549
MU - unitary global Thom spectrum, 583
MUP - periodic unitary global Thom spectrum, 580
O - ultra-commutative monoid of orthogonal groups, 135
 $O(V, W)$ - Thom space of orthogonal complement bundle, 229
P - global projective space, 149, 654
Pin - orthogonal monoid space of pin groups, 139
 Pin^c - orthogonal monoid space of pin^c groups, 140
RO - orthogonal representation ring global functor, 164
SO - ultra-commutative monoid of special orthogonal groups, 136
SU - ultra-commutative monoid of special unitary groups, 136
Sp - ultra-commutative monoid of symplectic groups, 138
Spc - category of topological spaces, 688
Spin - ultra-commutative monoid of spin groups, 139
 Spin^c - ultra-commutative monoid of spin^c groups, 140
T - category of compactly generated spaces, 688
U - ultra-commutative monoid of unitary groups, 136
bO - global BO , 172
bOP - periodic global BO , 182
bSp - global $BS p$, 186
bSpP - periodic global $BS p$, 186
bU - global BU , 186
bUP - periodic global BU , 186
 β - Bott morphism from **BUP** to $\Omega\mathbf{U}$, 224
 β - Bott class in $\pi_2^e(\mathbf{ku})$, 655
 $\beta_{G,W}$ - equivariant Bott class of a Spin^c -representation, 656
ko - real connective global K-theory, 631
ku - connective global K-theory, 630
 \mathbf{ku}^c - global connective K-theory, 684
mO - global Thom spectrum, 560
mOP - periodic global Thom spectrum, 560
 $\mathbf{mO}_{(m)}$ - truncated global Thom spectrum, 568
mU - unitary global Thom spectrum, 580
 \boxtimes - box product of orthogonal spaces, 55
cyc - global family of finite cyclic groups, 677
 $\exp(R)$ - global Green functor of exponential sequences, 482
 $[[X, Y]]_{\mathcal{F}}$ - morphism group in the \mathcal{F} -global stable homotopy category, 412
 λ_X^V - natural π_* -isomorphism of orthogonal G -spectra $X \wedge S^V \rightarrow \text{sh}^V X$, 239
 λ_X - natural global equivalence of orthogonal spectra $X \wedge S^1 \rightarrow \text{sh} X$, 239
 $\lambda_{G,V,W}$ - fundamental global equivalence of orthogonal spectra, 364
 \mathbb{A} - Burnside ring global functor, 373
 $\mathbb{A}^+(G)$ - monoid of isomorphism classes of finite G -sets, 152
 $\mathbb{A}^+(G, K)$ - monoid of isomorphism classes of G -free K - G -sets, 127
 $\mathbb{P}(Y)$ - free ultra-commutative monoid generated by Y , 96
 $\hat{\mathbb{S}}$ - completed sphere spectrum, 447
 \mathbb{S} - sphere spectrum, 372
 $\text{map}(Y, Z)$ - unbased mapping space, 707
 $\text{map}_*(Y, Z)$ - based mapping space, 710
 \mathbf{S}^1 - simplicial circle, 764
 $N_n^G(X)$ - equivariant geometric bordism, 585
 \natural - monomorphism $\Sigma_k \wr \Sigma_m \rightarrow \Sigma_{km}$, 113
 $\text{pic}(R)$ - Picard monoid of an ultra-commutative ring spectrum, 478
 $\rho_{G,V,W}$ - fundamental global equivalence of orthogonal spaces, 27
 $\text{sh}^V X$ - V th shift of the orthogonal spectrum X , 238
 σ^G - stabilization map $\pi_0^G(Y) \rightarrow \pi_0^G(\Sigma_+^\infty Y)$, 297
 $\sigma_{G,V}^U$ - unitary Thom class in $\mathbf{MU}_V^G(S^{2n})$, 583
 $\sigma_{G,V}$ - Thom class in $\mathbf{MOP}_G^0(S^V)$, 554
 $\sigma_{V,W}$ - structure map of an orthogonal spectrum, 230
 $\sigma_{V,W}^{\text{op}}$ - opposite structure map of an orthogonal spectrum, 230
 $\text{sk}^m X$ - m -skeleton of X , 801
 \wedge - smash product of orthogonal spectra, 333
 $\wedge_{\mathcal{F}}^L$ - derived smash product, 403

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- $\langle e \rangle$ - global family of trivial groups, 64
 tr_H^G - degree zero transfer, 279
 tr_H^G - transfer map, 129
 $\xi(V, W)$ - orthogonal complement vector bundle, 229
 bE - global Borel theory, 444
 c_g - conjugation by g , 82
 $d_{G,V}$ - equivariant bordism class of a representation, 592
 $e(V)$ - Euler class in $\pi_0^G(\mathbf{MOP})$, 556
 e_H - stable tautological class in $\pi_0^H(\Sigma_+^\infty G/H)$, 259
 $e_{G,V}$ - stable tautological class in $\pi_0^G(\Sigma_+^\infty \mathbf{L}_{G,V})$, 356
 $s(\mathcal{U}_G)$ - poset of G -subrepresentation of \mathcal{U}_G , 21
 $u_{G,V}$ - tautological class in $\pi_0^G(\mathbf{L}_{G,V})$, 83
 $\mathcal{A}bMon$ - category of abelian monoids, 114
 $\mathcal{A}b$ - category of abelian groups, 369
 $\mathcal{G}\mathcal{F}$ - category of global functors, 369
 $\mathcal{G}\mathcal{F}_{\mathcal{F}}$ - category of \mathcal{F} -global functors, 416
 $\mathcal{G}\mathcal{H}$ - global stable homotopy category, 351
 $\mathcal{G}\mathcal{H}_{\mathcal{F}}$ - global stable homotopy category with respect to the global family \mathcal{F} , 404
 $\mathcal{G}lGre$ - category of global Green functors, 463
 $\mathcal{G}lPow$ - category of global power functors, 465
 Out - category of finite groups and conjugacy classes of epimorphisms, 456
 Rep - category of compact Lie groups and conjugacy classes of homomorphisms, 83
 spc - category of orthogonal spaces, 3
 Sp - category of orthogonal spectra, 230
 $G\text{-Mack}$ - category of G -Mackey functors, 320
 GSp - category of orthogonal G -spectra, 231
 $G\text{-SH}$ - G -equivariant stable homotopy category, 448
 $ucom$ - category of ultra-commutative ring spectra, 462
 $umon$ - category of ultra-commutative monoids, 94

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