Table S1: Summary of Integrative Structure Determination of Structure of the Nup84 subcomplex of the Nuclear Pore Complex (PDBDEV00000001)

1. Model Composition	
Entry composition	- Nup85: Chain B (744 residues) - Seh1: Chain F (349 residues) - Nup145c: Chain E (712 residues) - Nup120: Chain C (1037 residues) - Nup84: Chain A (726 residues) - Sec13: Chain G (297 residues) - Nup133: Chain D (1157 residues)
Datasets used for modeling	 Experimental model, PDB ID: 3JRO Experimental model, PDB ID: 3F3F Experimental model, PDB ID: 3IKO Comparative model, template PDB ID: Not listed Experimental model, PDB ID: 3CQC Comparative model, template PDB ID: Not listed Experimental model, PDB ID: 4LCT Experimental model, PDB ID: 3EWE Comparative model, template PDB ID: Not listed Experimental model, PDB ID: 3F7F Experimental model, PDB ID: 3HXR Experimental model, PDB ID: 4FHN Comparative model, template PDB ID: Not listed Experimental model, PDB ID: 4Q9T Comparative model, template PDB ID: Not listed Experimental model, PDB ID: 314R Experimental model, PDB ID: 3KFO Comparative model, template PDB ID: Not listed Experimental model, PDB ID: 3BG1 Experimental model, PDB ID: 3BG0 Comparative model, template PDB ID: Not listed Experimental model, PDB ID: 3F3F Experimental model, PDB ID: 2PM7 CX-MS data, Linker name and number of cross-links: DSS, 164 cross-links DSS, 164 cross-links CX-MS data, Linker name and number of cross-links: EDC, 127 cross-links EM raw micrographs, EMDB ID: Not listed 2DEM class average, EMDB ID: Not listed
2. Representation	
Atomic structural coverage	84%
Number of <u>rigid bodies</u> , <u>flexible units</u>	,

Rigid bodies	- A: 7-20:Comparative model/None, 27-80:Comparative model/None, 96-126:Comparative model/None, 136-364:Comparative model/None, 372-483:Comparative model/None, 506-562:Comparative model/None, 575-726:Comparative model/None B: 67-122:Comparative model/None, 135-427:Comparative model/None, 461-529:Comparative model/None, 533-602:Comparative model/None, 620-671:Comparative model/None, 680-743:Comparative model/None C: 1-29:Comparative model/None, 53-212:Comparative model/None, 221-305:Comparative model/None, 311-429:Comparative model/None, 440-710:Comparative model/None, 711-712:Comparative model/None, 727-781:Comparative model/None, 805-892:Comparative model/None, 903-910:Comparative model/None, 921-1010:Comparative model/None, 1023-1037:Comparative model/None D: 56-78:Comparative model/None, 133-144:Comparative model/None, 162-184:Comparative model/None, 193-200:Comparative model/None, 206-249:Comparative model/None, 258-480:Comparative model/None, 490-763:Comparative model/None, 772-1155:Comparative model/None E: 126-144:Comparative model/None, 151-175:Comparative model/None, 151-175:Comparative model/None, 182-553:Comparative model/None F: 1-248:Experimental model/3F3F, 288-346:Experimental model/3F3F, 288-346:Experimental model/3F3F, 288-346:Experimental model/2PM7, 166-296:Experimental model/2PM7.
Flexible units	- A: 1-6, 21-26, 81-95, 127-135, 365-371, 484-505, 563-574 B: 1-66, 123-134, 428-460, 530-532, 603-619, 672-679, 744-744 C: 30-52, 213-220, 306-310, 430-439, 713-726, 782-804, 893-902, 911-920, 1011-1022 D: 1-55, 79-85, 126-132, 145-161, 185-192, 201-205, 250-257, 481-489, 764-771, 1156-1157 E: 1-125, 145-150, 176-181, 554-712 F: 249-287, 347-349 G: 1-1, 159-165, 297-297.
Resolution	Rigid bodies: 1 residue per bead. Flexible regions: N/A
3. Restraints	
Physical principles	Excluded volume and Sequence connectivity.
Experimental data	- 1 unique CrossLinkRestraint: DSS, 164 cross-links - 1 unique CrossLinkRestraint: EDC, 127 cross-links - 1 unique EM2DRestraint: Number of micrographs: 800, Image resolution: 30.0
4. Validation	
Sampling validation	Information related to sampling validation has not been provided

Clustering algorithm ,clustering feature	Distance threshold-based clustering used if ensembles are deposited, dRMSD
Number of ensembles	
Number of models in ensembles	1257, 1010
Model precision (uncertainty of models)	15.4Å, 12.7Å
Quality of data	-
Assessment of atomic segments	-
Fit of the model to information used to compute it	Fit of model to information used to compute it has not been determined
Fit of the model to information not used to compute it	Fit of model to information not used to compute it has not been determined
5. Methodology and Software	
<u>Method</u>	Sampling
Method Name	Sampling Replica exchange Monte Carlo